SEQUOIA
Ecological Consulting, Inc.

Bourdet Ranch
Notice of Violation Abatement Project
Santa Clara County, California

Biological Resources Report

August 2022

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CONTENTS

FIGURES

TABLES

APPENDICES

1.0 INTRODUCTION

Sequoia Ecological Consulting, Inc. (Sequoia) has prepared this Biological Resources Report for the proposed Bourdet Ranch Notice of Violation Abatement Project site (hereafter referred to as "the project site"), located on the southern side of Pacheco Pass Highway (California State Route 152) in Santa Clara County, California (Figures 1 and 2). Due to its rural character, there is no street address for this location. Our analysis provides a description of existing biological resources on the project site and identifies potentially significant impacts that could occur to sensitive biological resources from the proposed project.

Biological resources include common plant and animal species, and special-status plants and animals as designated by the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), National Marine Fisheries Service (NMFS), and other resource organizations including the California Native Plant Society (CNPS). Biological resources also include waters of the United States and State of California, as regulated by the U.S. Army Corps of Engineers (USACE), California Regional Water Quality Control Board (RWQCB), and CDFW. Please note that this analysis assesses the potential for impacts to regulated waters but does not provide the level of detail required for a formal delineation of "waters of the United States" suitable for submittal to USACE, the regulatory agency that defines waters of the United States.

In accordance with the California Environmental Quality Act (CEQA) checklist, this Biological Resources Report also provides mitigation measures for "potentially significant" impacts that could occur to biological resources pursuant to CEQA (California Public Resources Code [CPR] §§ 21000 et seq.; 14 California Code of Regulations [CCR] §§ 15000 et seq.). The prescribed mitigation measures would reduce impacts to levels considered "less than significant" pursuant to CEQA. Accordingly, this Biological Resources Report is suitable for review or inclusion in a review by the County of Santa Clara or the proposed project pursuant to CEQA.

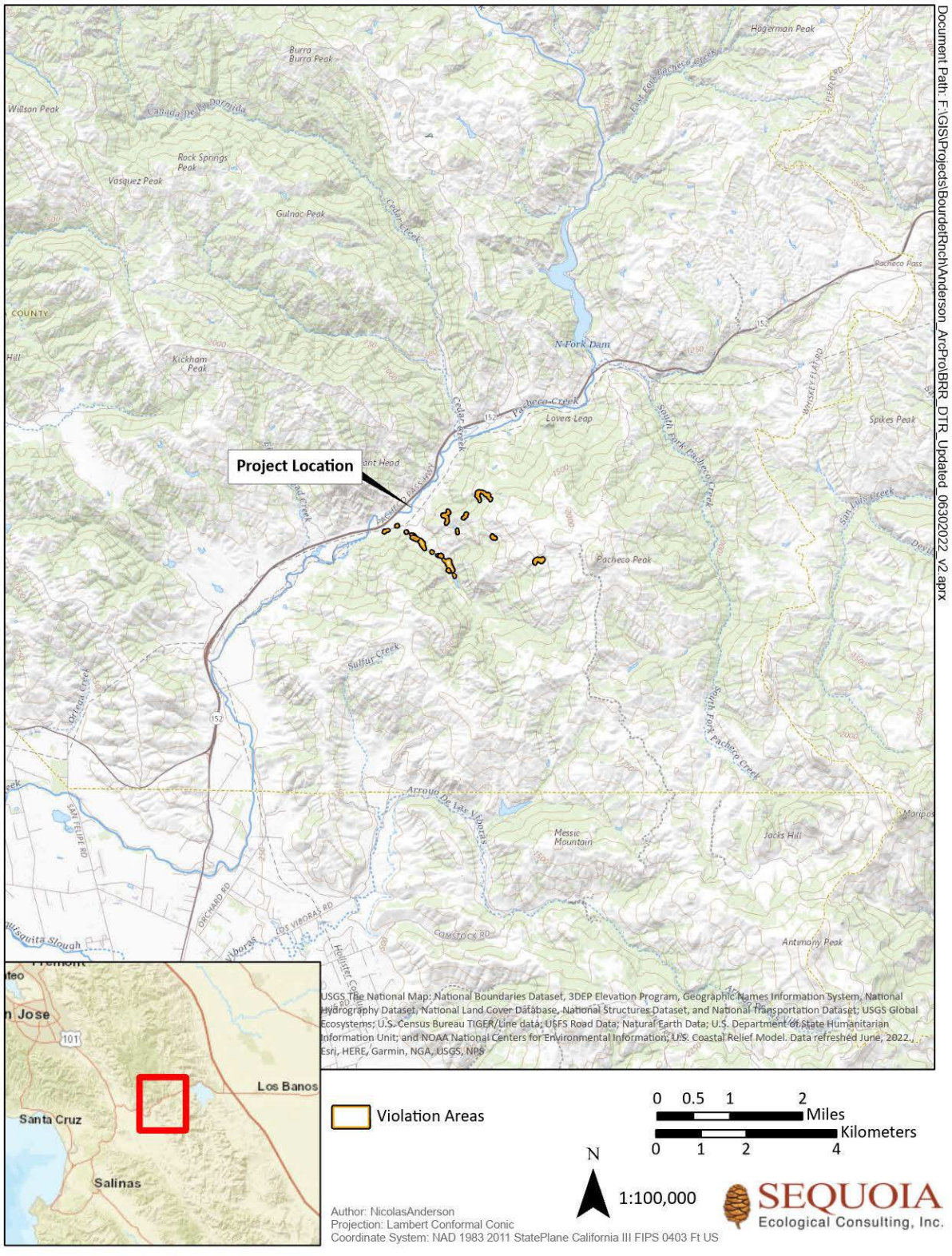
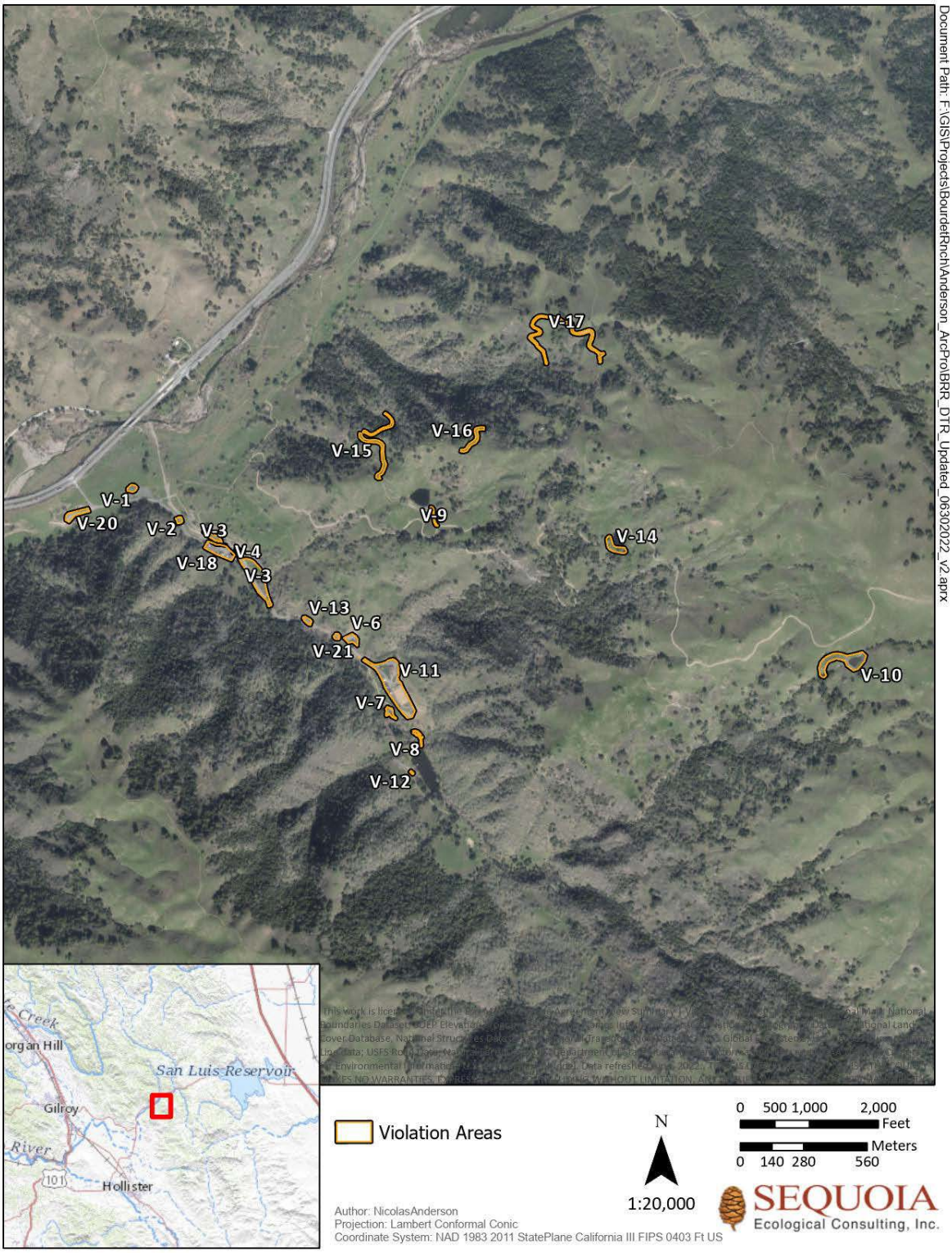


Figure 1. Regional Map Showing the Location of and Area Surrounding the Bourdet Ranch Property in Santa Clara County, California



*Violation area names correspond with locations and descriptions provided in Table 1.

Figure 2. Project Area Map Showing Named Violation Areas*

2.0 LOCATION AND SETTING

The project area is comprised of 3,354 acres of privately-owned property, located approximately 12 miles east of Gilroy, California. The project area lies south of Highway 152, and roughly 11 miles west of the San Luis Reservoir and Pacheco State Park. Henry Coe State Park is located north of Highway 152.

One main road, with restricted access, is located within the project area. This dirt, gravel, and concrete road leads from Highway 152 across the bottom of Harper Canyon and winds up the eastern hillside before departing the property along the eastern boundary. There is also a concrete and dirt road that leads to the top of Pacheco Peak, where a privately owned radio tower and other communications facilities are located. Third parties have access easements for the road to maintain facilities atop Pacheco Peak. There are scattered dirt roads throughout the property that depart from the main road on both the south- and north-facing hills, which are required for ranching and rangeland management. These smaller dirt roads are maintained on an as-needed basis.

Harper Canyon Creek, a seasonal stream that runs into Pacheco Creek, runs through the bottom of the property, bisecting the north- and south-facing sides of Harper Canyon. A large, man-made, unnamed reservoir feeds into Harper Canyon Creek. Multiple smaller ephemeral creeks scattered throughout the property also feed into Harper Canyon Creek. Various man-made cattle ponds are also scattered on site. Most of the property is utilized as rangeland for cattle operations. The surrounding properties are similarly undeveloped, rural, and utilized for cattle grazing practices.

3.0 PROJECT DESCRIPTION

The project is the abatement of unpermitted grading on the Bourdet Ranch property on Assessor's Parcel Numbers (APNs) 898-19-043, 898-19-005, 898-19-029, and 898-19-003, based on violation areas that are included on a map prepared by County of Santa Clara Department of Planning and Development staff member Darrell Wong, P.E., dated February 12, 2019, and the County of Santa Clara Planning Department's Grading Abatement Application (PLN20-139) letter response, dated November 23, 2020 (Appendix H). Sequoia understands that the County letter incorporates comments from the California Department of Fish and Wildlife's "Notice of Violation of Fish and Game Code Section 1602" letter dated October 15, 2020, and letter from the Central Coast Regional Water Quality Control Board dated April 23, 2019. Additional comments were provided by the County, CDFW, CalFire, and the HCP office on October 26, 2021, after submittal of preliminary design plans and the Biological Resource Report on August 26, 2021. Based on conversations between Sequoia, Hanna-Brunetti, and Walls Land + Water, several rounds of Agency meetings, and using the "Harper Canyon Restoration Plans 30% Plans 2022-6-2 DRAFT" (Appendix I) and "Bourdet Plan 220804" (Appendix J), the project will include the following components:

1. Restore the Harper Canyon stream channel to near pre-violation conditions, enhance the floodplain for restoration of sycamore alluvial woodland habitat, and reduce fine sediment delivery to the creek due to bank erosion and channel incision. The project is composed of three design elements:
    a. *Creek and Floodplain Restoration*: At the grading violation site in the vicinity of the shop, buildings and bridge, restore Harper Canyon stream channel to an alignment and channel geometry similar to its pre-violation condition, enhance the creek floodplain for restoration of sycamore alluvial woodland habitat, and install a new clear channel-spanning replacement bridge. Install rock-slope protection along left bank downstream of the bridge to protect the existing road and facilities and reduce fine sediment delivery due to bank erosion.
    b. *Ford Crossing Improvement*: At the existing low water "ford" crossing, remove the channel-spanning concrete barrier block grade control structure, restore natural channel bed and bank geometry, and provide for stable wet crossing at natural channel bed elevation and stable driveway ramps on both sides.
    c. *Reservoir Spillway Channel Bed and Bank Erosion Protection*: Downstream of the bedrock reservoir spillway, remove the channel-spanning concrete barrier block grade control and weir structure and replace it with an engineered boulder weir. Lay back over-steepened erodible soil slopes within the flood-prone area and elsewhere, and armor erodible banks below the 100-year water surface elevation with rock slope protection.
2. Legalize or abate remaining violation areas, outside of Harper Canyon Creek. Based on preliminary abatement plans provided by Hanna-Brunetti (Appendix J), the following additional work will occur:
    a. Area A: Existing grading violation to be legalized, existing stockpile to be removed.
    b. Area B: Existing grading violation to be legalized.
    c. Area C: Existing grading violation to be legalized.
    d. Area D: Existing grading violation to be legalized.
    e. Area E: Existing grading violation to be legalized.
    f. Area 1: Existing dirt road to be removed and restored to original condition.
    g. Area 2: Existing dirt road to be removed and restored to original condition.
    h. Area 3: Existing dirt road to be removed and restored to original condition.
    i. Area 4: Existing drainage swale to be removed and restored to original condition. Existing berm south of pond to be legalized.
    j. Area 5: Existing pond to be legalized.
    k. Area 6: Existing pond to be restored.
    l. Private Driveway: To be legalized.

3.1 Project Work Areas and Proposed Abatement

Sequoia reviewed the preliminary design plans provided in Appendices I and J and created a combined project area that covered all project activities. Sequoia then assigned each discrete work area a unique identifier for uniform tracking, identified the nature and description of the violation, classified the disturbance type in accordance with the Santa Clara Valley Habitat Plan and proposed abatement (temporary/permanent), and quantified impact areas based on maximum grading extents. A summary of the violations is provided in Table 1. Narrative and key design features for each group of proposed abatements are provided in Sections 3.1.1-3.1.4. Temporary and permanent impact buffer calculations were included in acreages for each violation area (Table 1).

The Bourdet Ranch NOV project encompasses multiple aspects to address different portions of the violation areas and can be grouped according to proposed abatement activities: stream restoration (V-3, V-7, V-8), culvert work and bridge replacement (V-2, V-4, V-5, V-6, V-19), ranch roads and stock ponds (V-1, V-9, V-10 V-13, V-14, V-15, V-16, V-17), and Legalize residential and ranch facilities (V-11, V-12, V-18, V-20, V-21). A summary of proposed abatement work or legalization is provided in the subsections that follow for each group.

Table 1. Summary of Violations and Proposed Abatement, Compiled from Preliminary Design Plans (Appendices I and J).

Violation Area	Name	Description	Habitat Type	Area (ac.)*	Impact Type	Proposed Abatement
V-1	Stockpile Area	A large stockpile of material near property entrance. Adjacent to Harper Canyon Creek.	California annual grassland	0.34	Temporary	Remove stockpile (Appendix J)
V-2	Double Culvert Crossing	Erosion of crossing fill above culverts due to improperly placed concrete slope protection.	California annual grassland, sycamore alluvial woodland	0.69	Permanent	Remove concrete. Addition of rock rip rap to prevent further bed and bank erosion.
V-3	Grading in Harper Canyon Creek	Approximate graded area of impacts along lower Harper Canyon Creek.	Sycamore alluvial woodland	3.49	Temporary	Restore sinuosity, provide floodplain with high-flow weir. Restore riparian vegetation. (Appendix I)
V-4	Bridge over Harper Canyon Creek	Bridge construction in Harper Canyon Creek Channel.	Sycamore alluvial woodland	0.38	Permanent	Replace with appropriately sized free-span bridge and footings. (Appendix I).
V-5	Double Culvert Crossing	Erosion of crossing and fill above double culvert.	Valley oak woodland	0.18	Temporary	Replace and extend culvert and outfall protection to conform to grading toe. (Appendix I)
V-6	Double Culvert Crossing 2	Culvert crossing for drainage into Harper Canyon Creek.	Sycamore alluvial woodland	0.60	Permanent	Existing culvert to be legalized. (Appendix J)
V-7	Creek Crossing Downstream of Impoundment	Realignment of middle Harper Canyon Creek.	Sycamore alluvial woodland	0.43	Temporary	Remove concrete blocks and restore area impacted by ford crossing to natural elevation contours. (Appendix I)
V-8	Impoundment on Harper Canyon Creek	Eroded eastern drainage and concrete blocks placed across eastern drainage.	Sycamore alluvial woodland	0.38	Temporary	Restore incised channel and stabilize by constructing an engineered boulder weir. (Appendix I)
V-9	West Cattle Stock Pond Impoundment	Dam modification and expansion	California annual grassland	0.27	Temporary	Existing drainage swale to be restored to original condition, restore connecting earthen drainage swale. (Appendix J)
V-9	West Cattle Stock Pond Impoundment	Dam modification and expansion	California annual grassland, pond	0.51	Permanent	Berm added on southern portion of pond to be legalized. (Appendix J)

Table 1. Summary of Violations and Proposed Abatement, Compiled from Preliminary Design Plans (Appendices I and J).

Violation Area	Name	Description	Habitat Type	Area (ac.)*	Impact Type	Proposed Abatement
V-10	East Cattle Stock Pond Impoundment	Channelized outflow eroded grasslands connecting to a tributary downstream of dam.	California annual grassland, mixed oak woodland and forest, pond	2.75	Temporary	Remove pond, geology of area too unstable to support permanent pond and continued erosion occurring. Gullying from erosion in uplands will be restored. (Appendix J)
V-11	House, Horse Arena Area	Unpermitted grading to construct house, horse arena, and other structures.	California annual grassland	7.87	Permanent	Legalize (Appendix J)
V-12	ADU Area	Unpermitted grading to construct secondary residence	Valley oak woodland	0.08	Temporary	Remove current ADU, to be replaced with legal-sized 120 sq ft structure compatible with emergency vehicle access requirements. (Appendix J)
V-13	Harper Canyon Creek Road Grading	Unpermitted road grading along Harper Canyon Creek	Valley oak woodland	0.81	Permanent	Legalize (Appendix J)
V-14	Middle Cattle Stock Pond Impoundment	Impoundment, grading of banks, dam, and drainage	California annual grassland, coast live oak woodland and forest, pond	1.83	Permanent	Legalize (Appendix J)
V-15	Upland Road Grading 1	Unpermitted road grading	California annual grassland, mixed oak woodland and forest	2.03	Temporary	Remove/restore ranch road (Appendix J)
V-16	Upland Road Grading 2	Unpermitted road grading	California annual grassland, mixed oak woodland and forest	0.77	Temporary	Remove/restore ranch road (Appendix J)
V-17	Upland Road Grading 3	Unpermitted road grading	California annual grassland, mixed oak woodland and forest	2.73	Temporary	Remove/restore ranch road (Appendix J)

Table 1. Summary of Violations and Proposed Abatement, Compiled from Preliminary Design Plans (Appendices I and J).

Violation Area	Name	Description	Habitat Type	Area (ac.)*	Impact Type	Proposed Abatement
V-18	Bridge Area Construction	Building pad adjacent to bridge and the building footprints of several unpermitted structures	California annual grassland, sycamore alluvial woodland	2.55	Permanent	Legalize (Appendix J)
V-19	Double Culvert Crossing on a Tributary	Plastic double culvert of 30-inch diameter installed with cast-in-place concrete	Sycamore alluvial woodland	0.22	Permanent	Legalize (Appendix J)
V-20	Fill Area	Unpermitted fill area to be legalized	California annual grassland, developed/ruderal	1.72	Permanent	Legalize (Appendix J)
V-21	Turn Around Grading	Unpermitted turn around grading	California annual grassland, sycamore alluvial woodland	1.26	Permanent	Legalize (Appendix J)

*Includes temporary and permanent disturbance buffer calculations. A 50-foot buffer around permanent impacts and a 10-foot buffer around temporary impacts was added for each violation area.

3.1.1 Stream Restoration

Harper Canyon Creek will be restored to pre-violation conditions based on the preliminary plans provided by Walls Land and Water (Appendix I), which were based on historical LIDAR data collected pre-violation. Preliminary plans created by Hanna-Brunetti (Appendix J) are also used to describe abatement activities throughout the Project area. Both of these plan sets were prepared to address violations documented in the County of Santa Clara's Department of Planning and Development's Incomplete Letter PLN20-139 (Santa Clara County 2020) and subsequent "Incomplete" Grading Abatement Application letters (dated October 26, 2021).

At V-3, the graded stream channel will be restored and aligned to a condition close to its original footprint but designed to reduce grading and allow for a buffer between the access road and the stream in case of high-flow events. The sycamore alluvial woodland floodplains along the stream channel both north and south of the bridge crossing will be restored, and a 25-foot-wide constructed riffle will be added north of the bridge. Rock slope protection will also be installed just west of the riffle. Two additional gravel bars (riffles) will be installed in the restored main channel. A rock weir will be added at the entrance to the secondary channel, and the floodplain will be restored to pre-violation conditions. South of the bridge, the main channel will be restored, and the current channel will be maintained as a secondary channel. Two new floodplains will be added at 11,545 and 8,600 square feet. Two 25-foot-wide constructed riffles will be added to the restored main channel. A buried rock weir will be added at the secondary channel entrance. Restoration plantings will be placed in the newly created floodplains after grading has been completed to offset impacts from removed trees and will aim to restore sycamore alluvial woodland habitat in the violation area. Total grading for V-3 includes approximately 2.68 acres, and total impacts are approximately 3.49 acres, including the temporary disturbance buffer.

The ford low-water crossing at V-7 will be repaired and will restore the natural creek bed and bank elevation contours, and removal of the concrete barrier block grade control structures will occur. The design of the channel bed and bank will be field fit to minimize impacts to the existing riparian vegetation surrounding the area. On either side of the low water crossing ford, a natural rock-reinforced channel low-water wet crossing with a 10% rock-reinforced max sloped ramp will be installed for vehicle access to the west side of the property and not for access to the secondary residence, which is proposed to be removed and converted to a 120-square foot storage shed (V-12). Approximate grading quantities at this site is 0.29 acre.

The reservoir spillway area at V-8 will also be repaired; boulder rip-rap slope protection will be installed, a concrete barrier block weir structure will be removed and replaced with an engineered boulder weir structure, engineered to match the elevation, where a tributary drainage flows into the spillway channel from the north. Boulders will be added and reallocated throughout the channel. Grading of approximately 0.1 acre to restore the channel at this location to pre-violation contours will also occur.

3.1.2 Culvert Replacement

The previously identified culvert shown at V-5 will be replaced and reinstalled with appropriately sized culverts and engineered to properly convey water flows. The double culvert crossing at V-2 will have the poured concrete on the downstream end removed and replaced with rock riprap to prevent further bed and bank erosion. The bridge at V-4 will be removed and replaced with a bridge suitable to convey debris and sediment loads and resist creek erosion of the bed and banks in the creek location. The current bridge's western footing is located along the low-flow channel and the proposed replacement bridge will be engineered to appropriately convey water flows, be constructed as a free-span crossing that provides a minimum of 2 feet of free board above base flood elevation and will convey weight and clearance limitations.

3.1.3 Ranch Roads and Stock Ponds

Grading violations in the northeast portion of the project area are proposed to be restored to pre-violation conditions at V-15, V-16, and V-17. Following restoration, the restored graded road locations will be hydroseeded with native bromes or other native grasses. The drainage swale south of the west cattle stock pond impoundment will be removed and restored to pre-violation conditions (V-9). The berm at this location will be legalized. The unpermitted road grading at V-13 is proposed to be legalized. The base rock stockpile identified at V-1 will be removed. The stock pond at V-14 will be legalized; at V-14, the berm (fill area) that was added on the southwest side of the stock pond will be legalized. The stock pond at V-10 will be removed and restored to pre-violation conditions.

Stock Pond at V-10: At the east cattle stock pond impoundment (V-10), the stock pond will be removed and restored to pre-violation conditions. The eroded gully northwest of the pond will be restored to pre-violation conditions. The pond is unstable and causing continued erosion of adjacent upland habitats, according to the county geologist (PLN-20-139_Incomplete – R1, comment 56).

Stock Pond at V-14: At the northern cattle stock pond impoundment, during the winter of 2013, a berm was added on the southwest side of the pond to increase hydroperiod. This pond is significant in size (approximately 200 feet by 180 feet) and was estimated to be over 10 feet in depth. A natural spillway is located on the northeast edge of the pond. No abatement activities are proposed at this time for this pond; this is a historical pond site, dating back to at least 1998 based on aerial imagery.

3.1.4 Legalize Residential and Ranch Facilities

Improvements to the property at V-11, V-18, V-20, and V-21 are proposed to be legalized: (V-11) unpermitted grading to construct the house, horse arena, and other structures; (V-18) unpermitted building pad adjacent to the bridge and buildings of several unpermitted structures (workshop, kennels); (V-20) an unpermitted fill area on an existing gravel road, and (V-21) unpermitted turn-around grading. At V-12, unpermitted grading to construct the Accessory Dwelling Unit (ADU) will be partially removed

and restored to account for the riparian setback, but 120 square feet will be retained to be used as a storage shed.

3.2 Project Schedule and Approach

Project implementation is projected to begin in 2021 and will primarily include: preparation of geomorphological data, preparation of draft engineering design drawings, performance of any necessary field studies (e.g., wetland delineation, tree surveys), and agency coordination. Following the release of draft design drawings, initiation of permit applications for the RWQCB (401), USACE (404), CDFW Lake and Streambed Alteration Agreement (1602), and coverage under the Santa Clara Valley Habitat Conservation Plan (SCVHCP) will begin. Once permits have been secured with the aforementioned entities, groundbreaking on site for abatement will potentially commence in 2023-2024 (or as soon as practicable after obtaining all necessary approvals and regulatory permits) and will likely be subject to regulatory work windows for instream work. Earth moving activities are anticipated to only be allowed during a summer/fall work window during dry conditions. Equipment to be used for stream restoration and other earthmoving activities is anticipated to include excavators/backhoes, bulldozers, motor graders, and haul trucks. Revegetation activities may begin in the fall, though planting of riparian vegetation may occur during the winter to maximize likelihood of survival.

4.0 REGULATORY SETTING

Regulatory authority over biological resources is shared by federal, state, and local agencies under a variety of laws, ordinances, regulations, and statutes. Primary authority for biological resources lies within the land use control and planning authority of local jurisdictions (in this instance, Santa Clara County). A summary of these regulatory authorities and a brief discussion on applicability to the proposed project is provided below. More in-depth analyses are provided in Section 6 (Results) and Section 7 (Discussion and Impacts Assessment).

4.1 Federal

4.1.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) provides protection for federally listed endangered and threatened species and their habitats. A project may obtain permission to take federally listed species in one of two ways: a Section 10 Habitat Conservation Plan (HCP) issued to a non-federal entity, or a Section 7 Biological Opinion from the USFWS and/or the National Oceanic and Atmospheric Administration (NOAA) issued to another federal agency that funds or permits an action (e.g., USACE). Under either Section of the FESA, adverse impacts to protected species are avoided, minimized, and mitigated. Both cases require consultation with the USFWS and/or NMFS, which ultimately issues a Biological Opinion determining whether the federally listed species may be incidentally taken pursuant to the proposed action and authorizing incidental take.

Section 7 of the FESA requires that federal agencies develop a conservation program for listed species (FESA 7(a)(a)) and that they avoid actions that will jeopardize the continued existence of the species or result in the destruction or adverse modification of the species' designated critical habitat (FESA 7(a)(2)). FESA Section 9 prohibits all persons and agencies from take of threatened and endangered species (though the prohibition on taking listed plants only applies to plants taken from "areas under Federal jurisdiction" or plants taken "in knowing violation of any law or regulation of any State or in the course of any violation of a State criminal trespass law"). Those who violate this mandate face civil and criminal penalties, including civil fines of up to $25,000 per violation, as well as criminal penalties of up to $50,000 and imprisonment for 1 year. Section 10 of the FESA regulates a wide range of activities affecting fish and wildlife designated as endangered or threatened and the habitats on which they rely. Section 10 prohibits activities affecting these protected fish and wildlife species and their habitats unless authorized by a permit from the USFWS or NMFS. These permits may include incidental take permits, enhancement of survival permits, or recovery and interstate commerce permits. HCPs under Section 10(a)(1)(B) provide for partnerships with non-federal parties to conserve the ecosystems upon which listed species depend.

HCPs are required as part of an application for an incidental take permit under Section 10. They describe the anticipated effects of the proposed take, how those impacts will be minimized or mitigated, and how the HCP will be funded.

4.1.1.1 Applicability to the Proposed Project

The FESA gives regulatory authority to the USFWS for federally listed terrestrial species and non-anadromous fish. The NMFS has regulatory authority over federally listed marine mammals and anadromous fish. The Santa Clara Valley Habitat Plan (SCVHP; ICF 2012, discussed further in Section 4.3.1) provides Section 10 take coverage under the ESA for federally listed covered species with potential to occur in the project area, including California red-legged frog (CRLF; *Rana draytonii*) and California tiger salamander (CTS; *Ambystoma californiense*). If federally listed species not covered by the SCVHCP have potential to occur within the project area, take coverage may be obtained through Section 7 consultation between a federal agency (e.g., USACE) and USFWS and/or NMFS.

4.1.2 Migratory Bird Treaty Act of 1918

As administered by the USFWS, the Migratory Bird Treaty Act (MBTA) (16 USC 703 et seq.) makes it unlawful to "pursue, hunt, take, capture, kill, attempt to take, capture or kill, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export at any time, or in any manner, any migratory bird, or any part, nest, or egg of any such bird." This definition includes direct and indirect acts, except for harassment and habitat modification, which are not included unless they result in direct loss of birds, nests, or eggs.

4.1.2.1 Applicability to the Proposed Project

The project site provides suitable nesting habitat for common passerine (songbird) and raptor (bird of prey) species. These birds are protected pursuant to the MBTA. Prior to commencement of project-related activities, a pre-construction nesting bird survey would be performed, and active nests detected would be provided with an appropriately sized non-disturbance buffer delineated by a qualified biologist. See Impacts Analysis section below.

4.1.3 US Army Corps of Engineers – Clean Water Act – Section 404

The USACE regulates activities within "waters of the United States" pursuant to congressional acts: Section 404 of the Clean Water Act (CWA; 1977, as amended) and Section 10 of the Rivers and Harbors Act of 1899. Section 404 of the CWA requires a permit for discharge of dredged or fill material into waters of the United States. Under Section 404, waters of the United States are defined as all waters that are used currently, or were used in the past, or may be used in the future for interstate or foreign commerce, including waters subject to the ebb and flow of the tide up to the high tide line. Additionally, areas such as wetlands, rivers, and streams (including intermittent streams and tributaries) are considered waters of the United States. The extent of wetlands is determined by examining the presence of hydrophytic vegetation, hydric soils, and wetland hydrology. Under normal circumstances, all three of these parameters must be satisfied for an area to be considered a jurisdictional wetland under Section 404 of the CWA. Fill within wetlands is regulated under the CWA through a Nationwide Permit Program, Regional General Permit Programs, and an Individual Permit Program.

4.1.3.1 Applicability to the Proposed Project

Stock ponds are exempted from the CWA under Section 404(f)(1) and therefore will not require a Section 404 permit. However, Harper Canyon Creek and associated tributaries will likely fall under USACE jurisdiction pursuant to Section 404 of the CWA. Thus, prior authorization from USACE pursuant to Section 404 of the CWA will be required, as the proposed project involves work within USACE's jurisdiction to achieve restoration objectives and grading violation abatement. The USACE has issued a Regional General Permit that SCVHP applicants may also apply for to obtain Section 404 coverage for qualifying projects. If the project does not qualify under the RGP for SCVHP applicants, then coverage under a Nationwide or Individual Permit must be obtained.

4.2 State

4.2.1 California Environmental Quality Act

The CEQA requires public agencies in California to analyze and disclose potential environmental impacts associated with a proposed discretionary project that the agency will carry out, fund, or approve. Any significant impact must be mitigated to the extent feasible, below the threshold of significance.

4.2.1.1 Applicability to the Proposed Project

This document is suitable for use by the CEQA lead agency (Santa Clara County) for preparation of any CEQA review document prepared for the proposed project. This report has been prepared as a Biology Section suitable for incorporation into an Initial Study or the Biology Section of a Mitigated Negative Declaration or Environmental Impact Report.

4.2.2 California Endangered Species Act

The CDFW is responsible for administering the California Endangered Species Act (CESA). Section 2080 of the California Fish and Wildlife Code prohibits take of any species that the Fish and Wildlife Commission determines to be an endangered or threatened species. However, CESA does allow for take that is incidental to otherwise lawful development projects. Sections 2081(b) and (c) of CESA allow the CDFW to issue an incidental take permit for a state listed threatened and endangered species only if specific criteria are met (i.e., the effects of the authorized take are minimized and fully mitigated). The measures required to meet this obligation shall be roughly proportional in extent to the impact of the authorized taking on the species. Where various measures are available to meet this obligation, the measures required shall maintain the applicant's objectives to the greatest extent possible. All required measures shall be capable of successful implementation.

4.2.2.1 Applicability to the Proposed Project

The SCVHP is also a Natural Community Conservation Plan (NCCP) approved by CDFW, which provides take authorization of covered CESA-listed species at the state level. The SCVHCP applies to covered species that are listed jointly under the FESA and CESA (such as CTS) as well as covered species that are only listed under CESA (such as foothill yellow-legged frog [*Rana boylii*]). Additionally, NCCPs provide broader protections than FESA and CESA to sensitive natural communities to encourage conservation at the ecosystem and regional scales. The NCCP also addresses covered species that are not listed under FESA or CESA, such as western burrowing owl (*Athene cunicularia hypugaea*).

4.2.3 California Fish and Game Code – Section 1600 – Lake or Streambed Alteration Agreement

The CDFW regulates activities within watercourses, lakes, and in-stream reservoirs. Under Section 1602 of the California Fish and Game Code (CFGC)—often referred to as the Lake or Streambed Alteration Agreement (LSAA)—the CDFW regulates activities that would alter the flow or change or use any material from the bed, channel, or bank of any perennial, intermittent, or ephemeral river, stream, or lake. Each of these activities requires a Section 1602 permit. Section 1602 requires the CDFW to be notified of any activity that might affect lakes and streams. It also identifies the process through which an applicant can come to an agreement with the state regarding the protection of these resources, both during and following construction.

4.2.3.1 Applicability to the Proposed Project

Impacts to the bed, bank, and/or channel, or associated riparian vegetation of Harper Canyon Creek would be regulated by the CDFW pursuant to Section 1602 of the CFGC. As such, a Section 1602 agreement (i.e., Streambed Alteration Agreement) from the CDFW would be required for the proposed project.

4.2.4 California Fish and Game Code – Section 3500 – Nesting Bird Protection

CFGC Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by the CFGC or any regulation made pursuant thereto. CFGC Section 3503.5 protects all birds of prey (raptors) and their eggs and nests. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA. These regulations could require that elements of a project (specifically vegetation removal or construction near nest trees) be reduced or eliminated during critical phases of the nesting cycle unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds will not be disturbed, which may be subject to approval by the CDFW and/or the USFWS.

4.2.5 California Fish and Game Code – Fully Protected Species

CFGC Sections 3505, 3511, 4700, 5050, and 5515 afford full protection to a number of specific wildlife species. Fully protected species cannot be taken or possessed under state law, even if federal take authorization is issued, except in connection with a natural community conservation plan (NCCP) or for the purpose of scientific research and relocation of bird species for the protection of livestock.

4.2.5.1 Applicability to the Proposed Project

The project site provides suitable habitat for wildlife protected pursuant to CFGC Section 3500 and the MBTA. As such, pre-construction surveys for these species would need to be conducted prior to project commencement to ensure no direct mortality of these species occurs as a result of the proposed project. A list of animal species that have potential to occur on site is provided in Table 3.

4.2.6 Regional Water Quality Control Board – Clean Water Act – Section 401 and Porter-Cologne Water Quality Control Act

The State Water Resources Control Board (SWRCB) and RWQCB regulate activities in “waters of the state” (which includes wetlands) through two sources of legal authority: Section 401 of the CWA and the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) (Wat. Code, Div. 7, § 13000 et seq.). The Section 401 water quality certification program allows the state to ensure that activities requiring a federal permit or license comply with state water quality standards. Though similar to Section 404 and 401 requirements, the Porter-Cologne Act applies to all “waters of the state” rather than to the portions thereof below ordinary high water mark. “Waters of the state” is defined as any surface water or groundwater, including saline waters, within the boundaries of the state (Water Code § 13050I).

The Porter-Cologne Act requires any person discharging waste or proposing to discharge waste in any region that could affect the quality of the "waters of the state" to file a report of waste discharge. Pursuant to the Porter-Cologne Act, the RWQCB also regulates "isolated wetlands." Functionally, the RWQCB typically evaluates whether an additional waste discharge requirement is necessary for the balance between federal and state jurisdictional boundaries during the 401-certification process. The RWQCB issues a permit or waiver that includes implementing water quality control plans that reflect the beneficial uses to be protected. Waters of the state subject to RWQCB regulation extend to the top of bank, as well as isolated water/wetland features.

On April 2, 2019, the SWRCB adopted Resolution 2019-0015, thereby adopting a document entitled, "State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State" ("Procedures") for inclusion in the Water Quality Control Plans for Inland Surface Waters, Enclosed Bays, and Estuaries of California.

In taking this action, the SWRCB noted that under the Porter-Cologne Act, discharges of dredged or fill material to waters of the state are subject to waste discharge requirements or waivers thereof. The SWRCB further explained that "although the state has historically relied primarily on requirements in the CWA to protect wetlands, US Supreme Court rulings reducing the jurisdiction of the CWA over wetland areas by limiting the definition of 'waters of the United States' have necessitated the use of California's independent authorities under the Porter-Cologne Act to protect these vital resources."

The Office of Administrative Law (OAL) approved the Procedures on August 28, 2019. Pursuant to the Procedures, the effective date is nine months upon OAL approval. Accordingly, the Procedures became effective May 28, 2020.

By adopting the procedures, the SWRCB mandated and standardized the evaluation of impacts and protection of waters of the state from impacts due to dredge and fill activities. The procedures include (1) a wetland definition; (2) a jurisdictional framework for determining if a feature that meets the wetland definition is a water of the state; (3) wetland delineation procedures; and (4) procedures for application submittal, and the review and approval of dredge or fill activities.

The procedures define an area as a wetland if it meets three criteria: wetland hydrology, wetland soils, and (if vegetated) wetland plants. An area is a wetland if: (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.

By definition, Waters of the state includes more aquatic features than waters of the United States, which defines the jurisdiction of the federal government. Waters of the state are not so limited. In addition, the federal definition of a wetland requires a prevalence of wetland vegetation under normal circumstances. To account for wetlands in arid portions of the state, the SWRCB's definition differs from the federal definition in that an area may be a wetland even if it does not support vegetation. If vegetation is present, however, the SWRCB's definition requires that the vegetation be wetland

vegetation. The SWRCB's definition clarifies that vegetated and unvegetated wetlands will be regulated in the same manner.

The procedures also include a jurisdictional framework that applies to aquatic features that meet the wetland definition. The jurisdictional framework will guide applicants and staff in determining whether an aquatic feature that meets the wetland definition will be regulated as a water of the state. The jurisdictional framework is intended to exclude from regulation any artificially created, temporary features, such as tire ruts or other transient depressions caused by human activity, while still capturing small, naturally occurring features, such as seasonal wetlands and small vernal pools that may be outside of federal jurisdiction. The procedures do not expand the SWRCB's jurisdiction beyond areas already under SWRCB's jurisdiction.

The procedures exclude the following agricultural features from the protections accorded to wetlands: (1) ditches with ephemeral flow that are not a relocated water of the state or excavated in a water of the state; (2) ditches with intermittent flow that are not a relocated water of the state or excavated in a water of the state, or that do not drain wetlands other than any wetlands described in (4) or (5) below; (3) ditches that do not flow, either directly or through another water, into another water of the state; (4) artificially irrigated areas that would revert to dry land should application of waters to that area cease; or (5) artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, and settling basins.

The procedures clarify what information and analysis the applicant needs to submit to have a complete application. The procedures also standardize when an alternative analysis needs to be conducted and set a minimum mitigation ratio for any permanent impacts to waters of the state resulting from dredge and fill activities.

When an alternatives analysis is required, the applicant must demonstrate that the proposed alternative is the Least Environmentally Damaging Practicable Alternative (LEDPA). The term practicable means available and capable of being done after taking into consideration cost, existing technology, and other logistics in light of the overall project purpose.

4.2.6.1 Applicability to the Proposed Project

Harper Canyon Creek, its tributaries, and any adjacent seasonal wetlands on the project site likely fall under the RWQCB/SWRCB's jurisdiction pursuant to Section 401 of the CWA. Additionally stock ponds, while not exempt from the CWA, are likely considered "waters of the State" under Porter-Cologne Act. Thus, prior authorization from the RWQCB/SWRCB pursuant to Section 401 of the CWA and Porter-Cologne Act will be required as the proposed project requires working within these features to achieve project outcomes. Impacts to waters of the state would require mitigation to the satisfaction of the RWQCB prior to issuance of a permit for impacts to these features.

To comply further with the Porter-Cologne Act, adequate pre- and post-construction best management practices (BMPs) will be planned and incorporated into project implementation plans to protect downstream waterways. In addition, the project will develop a stormwater pollution prevention plan

(SWPPP) that will be submitted to the County of Santa Clara as a condition of project approval, demonstrating BMPs that will be installed/implemented prior to project commencement. Stormwater protection and treatment measures will be implemented to ensure that the proposed project remains in compliance with the Porter-Cologne Act.

4.3 Local

4.3.1 Santa Clara Valley Habitat Plan

The Santa Clara Valley Habitat Plan (ICF 2012) is a regional planning document that allows covered projects to utilize a streamlined process for permitting and mitigation. The SCVHP is both an HCP and an NCCP, providing a higher level of protection and conservation for 18 species of plants and wildlife, including 8 listed under the FESA, the CESA, or both. The SCVHP also protects wetlands, streams, and riparian habitats that are subject to the federal CWA and California's Porter-Cologne Water Quality Control Act, and Sections 1600-1616 of the CFGC (though it does not provide full authorizations for work in these federal and state jurisdictions), as well as other sensitive habitats and communities identified in the NCCP.

Coverage under the SCVHP also includes an agreement between State and Federal wildlife and wetland regulators and local jurisdictions that allows public and private entities to engage in the "incidental take" of listed species (i.e., to destroy or degrade habitat) in exchange for the implementation of SCVHP-prescribed measures to avoid, minimize, or compensate for the adverse effects on endangered species and natural communities. The SCVHP also identifies and protects regional lands to be preserved to benefit covered species and determines how these reserves will be managed and monitored to ensure each species' benefit.

The SCVHP covers approximately 510,000 acres primarily within southern Santa Clara County. The land included in this area is based on political, ecological, and hydrological factors, as well as the location of covered and conservation activities, from the Santa Clara/Alameda County border south to the Santa Clara/San Benito County border, and from the western edge of San Jose east to the eastern edge of the Santa Clara County boundary. The area encompasses all of the Llagas/Uvas/Pacheco watersheds within Santa Clara County, and all of the Coyote Creek watersheds, except for the Baylands area. A larger portion of the Guadalupe watershed is also included in the SCVHP.

4.3.1.1 Applicability to the Proposed Project

In accordance with the SCVHP, multiple conditions will apply to the project and will include the following:

- Condition 1: Avoid Direct Impacts on Legally Protected Plant and Wildlife Species
- Condition 3: Maintain Hydrological Conditions and Protect Water Quality
- Condition 4: Avoidance and Minimization for In-Stream Projects
- Condition 7: Rural Development Design and Construction Requirements
- Condition 8: Implement Avoidance and Minimization Measures for Rural Road Maintenance

- Condition 11: Stream and Riparian Setbacks
- Condition 12: Wetland and Pond Avoidance Minimization
- Condition 13: Serpentine and Associated Covered Species Avoidance and Minimization
- Condition 14: Valley Oak and Blue Oak Woodland Avoidance Minimization
- Condition 15: Western Burrowing Owl
- Condition 16: Least Bell's Vireo
- Condition 17: Tricolored Blackbird
- Condition 18: San Joaquin Kit Fox
- Condition 19: Plant Salvage when Impacts are Unavoidable
- Condition 20: Avoid and Minimize Impacts to Covered Plant Occurrences

Additionally, to participate in the SCVHCP, private applicants must pay for temporary and permanent impacts based on land cover type, activity type, and duration of impacts. Appendix L includes the Fiscal Year 2021 and 2022 Fee Calculator, "Exhibits 2/3," for permanent and temporary impacts (respectively). Following approval of the proposed abatement plans by the County, the applicant will complete an official application form for transmittal to the Valley Habitat Agency along with a final fee calculation worksheet and all required attachments. Santa Clara County will confirm application completeness and receipt of fees.

4.3.2 Santa Clara County Tree Preservation and Removal

Santa Clara County has a Tree Protection Ordinance (Ord. No. NS-1203.107, § 1, 2-11-97; Ord. No. NS-1200.302, § 5, 12-18-01; Santa Clara County 2022) that states "it shall be unlawful for any person to remove any protected tree on any private or public property in designated areas of the County without first obtained an Administrative Permit or an Encroachment Permit." A protected tree on any private or public property shall consist of any of the following:

- Any tree having a main trunk or stem measuring 37.7 inches or greater in circumference (12 inches or more in diameter) at a height of 4.5 feet above ground level, or in the case of multi-trunk trees, a total of 75.4 inches in circumference of all trunks (24 inches or more of the diameter) in the following areas of the County:
  1) parcels zoned "Hillsides" that are 3 acres or less
  2) parcels within a "-d" (Design Review) combining zoning district
  3) parcels within the Los Gatos Specific Plan area
- Any tree having a main trunk or stem measuring 18.8 inches or greater in circumference (6 inches or more in diameter) at a height of 4.5 feet above ground level, or in the case of multi-trunk trees, a total of 37.7 inches in circumference of all trunks (12 inches or more of the diameter) in the "-h1" New Almaden Historic Preservation Zoning District
- Any heritage tree, as that term is defined in §C16-2 of the Tree Preservation Ordinance

- Any tree required to be planted as a replacement for an unlawfully removed tree, pursuant to §C16-17(e) of the Tree Preservation Ordinance.
- Any tree that was required to be planted or retained by the conditions of approval for any Use Permit, Building Site Approval, Grading Permit, Architectural & Site Approval, Design Review, Special Permit or Subdivision.
- Any tree on any property owned or leased by the County of Santa Clara which measures over 37.7 inches in circumference (12 inches or more in diameter) measures 4.5 feet above ground, or which exceeds 20 feet in height.
- Any tree, regardless of size, within road rights-of-way and easements of the County, whether within or without the unincorporated territory of the County.

4.3.2.1 Applicability to the Proposed Project

Under the Santa Clara Tree Preservation and Removal ordinance, protected trees as defined under the ordinance do not occur on the project site. Remaining trees in the project area where they may be impacted by restoration work activities will be protected using measures outlined in the Tree Removal Report (Appendix F).

5.0 METHODS

Sequoia performed various desktop and in-field assessments to evaluate potential project impacts under CEQA as well as respond to specific County and agency comments. Sequoia evaluated the presence of and/or likelihood of occurrence of sensitive resources on the project site, then assessed potential impacts and mitigation measures based on project design and understanding.

5.1 Definitions

5.1.1 Special-Status Species

For the purposes of this document, special-status species include the following:

- Plant, fish, and wildlife species listed as Threatened or Endangered under FESA (50 CFR 17), and candidates for listing under the statute
- Species protected by the CFGC, including nesting birds and Fully Protected species
- Plant, fish, and wildlife species listed as Threatened or Endangered under CESA; and the laws and regulations for implementing CESA as defined in CFGC §2050 et seq. and the California Code of Regulations (CCR) 14 CCR §670.1 et seq., and candidates for listing under the statute (CFGC §2068)
- Species meeting the definition of 'Rare' or 'Endangered' under CEQA Guidelines 14 CCR §15125 and/or 14 CCR §15380, including plants listed on CNPS Lists 1A, 1B, 2A, 2B, 3, and 4
- USFWS Birds of Conservation Concern

- Species of Special Concern (SSC), as designated by the CDFW and required by 14 CCR §15380
- Avian species protected under the MBTA of 1918

5.2 Desktop Review

Sequoia reviewed relevant databases and literature for baseline information regarding biological resources occurring and potentially occurring on the project site and in the immediate vicinity. The review included the following sources:

- USFWS Information for Planning and Consultation (IPaC) search (USFWS 2021a), and Critical Habitat Report (USFWS 2021b)
- CNPS Rare Plant Inventory: Rare and Endangered Plants of California for the Pacheco Peak, California and eight surrounding U.S. Geological Survey (USGS) 7.5-minute quadrangles (CNPS 2021)
- NMFS Online Species List Query (NMFS 2021)
- USFWS National Wetlands Inventory (NWI; USFWS 2020)
- Natural Resources Conservation Service Web Soil Survey (NRCS 2021;)
- California Fish Passage Assessment Database (CDFW 2014)
- CDFW California Natural Diversity Database (CNDDB) for the project polygon and a 5-mile buffer (CDFW 2021)
- Aerial photographs (Google Earth 2021)

5.3 Site Assessment

Sequoia biologists conducted various surveys and site visits at the project area and surrounding vicinity from 2018 to 2021, including pond surveys and sampling for special-status amphibian species, burrowing owl reconnaissance surveys, camera trapping targeting San Joaquin kit fox, steelhead habitat assessment, foothill yellow-legged frog surveys, botanical surveys, site reconnaissance to map limits of grading violations, and tree assessments and inventories. Surveys involved searching all relevant habitats on the site and recording all plant and wildlife species observed. In preparation for this project, Sequoia cross-referenced the habitats occurring on the project site with the habitat requirements of regional special-status species to determine if the proposed project could directly or indirectly impact these species. Any special-status species or suitable habitat was documented. Species-specific survey areas documented in the SCVHP Geobrowser were field verified during the September 9, 2020, site visit to determine species suitability and likelihood of species occurrence on the Project area.

Tables 2 and 3 present the potential for occurrence of special-status plant and wildlife species known to occur in the vicinity of the project site, along with their habitat requirements, occurrence classification, and basis for occurrence classification.

Table 2. Special-Status Plant Species Evaluated for Potential to Occur in the Vicinity of the Bourdet Ranch Notice of Violation Abatement Project.

Species	Status	Typical Habitat and Bloom Period	Probability of Occurrence on Project Area
Campanula exigua Chaparral harebell	1B.2	Chaparral (rocky, usually serpentinite), 275-1,250 m. Blooms May-June.	**Low Potential**. Potential suitable habitat present in rocky areas of Diablan sage scrub if serpentinite present, but no serpentinite observed on the study area during limited reconnaissance.
Castilleja affinis var. *neglecta* Tiburon Indian paintbrush	FE, CT 1B.2	Valley and foothill grassland (serpentinite), 60-400 m. Blooms April-June.	**Low Potential**. No serpentine soil habitat present in project area. Not observed in study area, no known occurrences in Pacheco Pass area.
Ceanothus ferrisiae Coyote ceanothus	FE 1B.1	Rocky, serpentine, chaparral slopes and grasslands, 120-320 m. Blooms January-May.	**Low Potential**. No records of the species in the area. No serpentine habitat in Project area.
Cirsium fontinale var. *campylon* Mt. Hamilton thistle	1B.2	Chaparral, cismontane woodland, valley and foothill grassland, serpentine seeps. 100-890 m. Blooms (Feb) April-October.	**Low Potential**. No serpentine soil habitat present in project area. Not known to occur in southern reach of Santa Clara County.
Delphinium californicum ssp. *interius* Hospital Canyon larkspur	1B.2	Chaparral (openings), cismontane woodland (mesic), coastal scrub, 195-1,095 m. Blooms April-June.	**Moderate Potential**. Suitable habitat present in oak woodland and Diablan sage scrub. Not previously documented on site.
Dudleya abramsii ssp. *setchellii* Santa Clara Valley dudleya	FE 1B.1	Cismontane woodland, valley and foothill grassland (serpentinite, rocky), 60-455 m. Blooms April-October.	**Low Potential**. Potential suitable habitat present in rocky areas of California annual grassland if serpentinite present, but no serpentinite observed on the project area during limited reconnaissance.
Eryngium aristulatum var. *hooveri* Hoover's button-celery	1B.1	Vernal pools, 3-45 m. Blooms July.	**No Potential**. Vernal pools generally lacking from the study area. Not expected.
Eryngium spinosepalum Spiny-sepaled button-celery	1B.2	Valley and foothill grassland, vernal pools, 80-975 m. Blooms April-June.	**No Potential**. Occurs in wetlands and grasslands. No wetlands are known in project areas.
Extriplex joaquinana San Joaquin spearscale	1B.2	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland (alkaline), 1-835 m. Blooms April-October.	**No Potential**. No suitable alkaline habitat observed on the study area. Not expected.

Table 2. Special-Status Plant Species Evaluated for Potential to Occur in the Vicinity of the Bourdet Ranch Notice of Violation Abatement Project.

Species	Status	Typical Habitat and Bloom Period	Probability of Occurrence on Project Area
Fritillaria liliacea Fragrant fritillary	1B.2	Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland, associated with serpentine areas. 3-410 m. Blooms February-April.	**Low Potential**. No serpentine soil habitat present in project area. No known occurrences in Pacheco Pass area.
Hordeum intercedens Vernal barley	3.2	Coastal dunes, coastal scrub, valley and foothill grassland (saline flats and depressions), vernal pools, 5-1,000 m. Blooms March-June.	**No Potential**. No suitable saline habitat observed on the study area. Not expected.
Hoita strobilina Loma Prieta hoita	1B.1	Chaparral, cismontane woodland, riparian woodland, in serpentine-influenced areas. 30-860 m. Blooms May-July (Aug-Oct).	**Low Potential**. No serpentine soil habitat present in project area. Not known to occur along Pacheco Pass.
Leptosyne hamiltonii Mt. Hamilton coreopsis	1B.2	Cismontane woodland (rocky), 550-1,300 m. Blooms March-May.	**No Potential**. This species is only known from the Mt. Hamilton Range.
Lessingia micradenia var. *glabrata* Smooth lessingia	1B.2	Chaparral, cismontane woodland (serpentinite, often roadsides), 120-420 m. Blooms May-November.	**Low Potential**. No serpentine habitats are known in the study areas.
Malacothamnus arcuatus Arcuate bush-mallow	1B.2	Chaparral, cismontane woodland, 15-355 m. Blooms April-September.	**No Potential**. No known observations of species south or east of Gilroy, CA.
Malacothamnus hallii Hall's bush-mallow	1B.2	Chaparral, coastal scrub, 10-760 m. Blooms May-September.	**Moderate Potential**. Suitable habitat present in Diablan sage scrub. *Malacothamnus* sp. observed on the study area during reconnaissance.
Monolopia gracilens Woodland woollythreads	1B.2	Broad-leafed upland forest (openings), chaparral (openings), cismontane woodland, north coast coniferous forest (openings), valley and foothill grassland (serpentine), 100-1,200 m. Blooms February-July.	**Low Potential**. No serpentine habitat observed on the study area during limited reconnaissance.
Navarretia gowenii Lime Ridge navarretia	1B.1	Chaparral, 180-305 m. Blooms May-June.	**No Potential**. Species only known from two populations.
Navarretia nigelliformis ssp. *radians* Shining navarretia	1B.2	Cismontane woodland, valley and foothill grassland, vernal pools (sometimes clay), 65-1,000 m. Blooms March-July.	**No Potential**. No vernal pools or wetlands in project area.

Table 2. Special-Status Plant Species Evaluated for Potential to Occur in the Vicinity of the Bourdet Ranch Notice of Violation Abatement Project.

Species	Status	Typical Habitat and Bloom Period	Probability of Occurrence on Project Area
Navarretia prostrata Prostrate vernal pool navarretia	1B.1	Coastal scrub, meadows and seeps, valley and foothill grassland (alkaline), vernal pools (mesic), 3-1,210 m. Blooms April-July.	**No Potential**. Marginal habitat present in mesic areas of California annual grassland and associated seep areas, but no alkaline habitat observed.
Plagiobothrys glaber Hairless popcornflower	1A	Meadows and seeps (alkaline), marshes and swamps (coastal salt), 15-180 m. Blooms March-May.	**No Potential**. Suitable alkaline habitat lacking. Presumed extinct. Not expected.
Streptanthus albidus Metcalf Canyon jewelflower	FE 1B.1	Valley and foothill grassland, serpentine soils. 45-800 m. Blooms April-July.	**Low Potential**. No serpentine soils habitat present in project area. Only known records are from the region immediately east and south of San Jose, CA.
Streptanthus albidus ssp. *peramoenus* Most beautiful jewelflower	1B.2	Chaparral, cismontane woodland, valley and foothill grassland, serpentine soils. 95-1,000 m. Blooms (Mar) April-September (Oct).	**Low Potential**. No serpentine soils habitat present in project area. No records of the species occurring along Pacheco Pass Highway or within 5 miles.

Key to Status:	
FE	Federal Endangered
CE	California Endangered
CT	California Threatened
1A	CNPS Rare Plant Rank of plants presumed extirpated in California, rare or extinct elsewhere.
1B	CNPS Rare Plant Rank of plants rare, threatened, or endangered in California and elsewhere
2A	CNPS Rare Plant Rank of plants are presumed extirpated in California but common elsewhere.
3	CNPS Rare Plant Rank of plants about which we need more information (a review list)
.1/.2/.3	Seriously endangered in California/Fairly endangered in California/Not very endangered in California

Table 3. Special-Status Animal Species with Potential to Occur on the Bourdet Ranch Project Site

Scientific Name	Common Name	Listing Status	Habitat Requirements	Potential for Occurrences
Mammals				
Antrozous pallidus	Pallid bat	SSC	Occurs in deserts, grasslands, shrublands, woodlands, and forest. Most common in open, dry, habitats with rocky area for roosting. Roost must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	**Moderate Potential**. Marginal but potential roosting habitat occurs on the project site in mature sycamores or oaks. One CNDDB record (No. 250) from 1937 in Pacheco Pass quad. Pre-construction surveys will be conducted; see text.
Corynorhinus townsendii	Townsend's big-eared bat	SSC	Found in a wide variety of habitats, including deserts and high-elevation mixed/coniferous forest. Females form maternity colonies in buildings, caves and mines, and males roost singly or in small groups. Forages along streams or in wooded habitats.	**Moderate Potential**. Marginal but potential roosting habitat occurs on the project area in on-site structures. Two CNDDB occurrences (Nos. 648, 649) from culverts/bridges at Pacheco Creek north of project site. Pre-construction surveys will be conducted; see text.
Taxidea taxus	American badger	SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats with friable soils. Needs sufficient food, friable soils, and open uncultivated ground. Cannot live in frequently plowed fields. Preys on burrowing rodents.	**Moderate Potential**. Known to occur in vicinity, not observed on project site and not detected on camera traps. Multiple recent CNDDB occurrences from Highway 152 through Pacheco Pass and north of project area. Suitable habitat is present.
Vulpes macrotis mutica	San Joaquin kit fox	FE, CT	Occurs in annual grasslands or open stages with scattered shrubby vegetation. Requires loose sandy textured soils for burrowing.	**Unlikely**. No dens detected during 2020 surveys and marginal suitable habitat occurs on the project site. CNDDB occurrence from 2006 (No. 45) detected fox at nearby state park. Pre-construction surveys will be conducted; see text.

Table 3. Special-Status Animal Species with Potential to Occur on the Bourdet Ranch Project Site

Scientific Name	Common Name	Listing Status	Habitat Requirements	Potential for Occurrences
Amphibians/Reptiles				
Ambystoma californiense	California tiger salamander	FT, CT, SSC	Occurs in vernal and seasonal pools and associated grasslands, oak savannah, woodland, and coastal scrub. Needs underground refuges (i.e., small mammal burrows, pipes) in upland areas such as grassland and scrub habitats.	**High Potential**. Unlikely to occur in Project area. CTS have been documented breeding on eastern portion of site; dispersal distance is within range of V-10. Suitable refugia habitat present.
Rana draytonii	California red-legged frog	FT, SSC	Occurs in semi-permanent or permanent water at least 2 feet deep, bordered by emergent or riparian vegetation, and upland grassland, forest, or scrub habitats for aestivation and dispersal.	**Present**. Have been documented at area V-10, slated for remediation, but bullfrogs have since taken over the site and likely now preclude CRLF from breeding. Small numbers of CRLF may still be present. Suitable upland habitat present.
Emys marmorata	Western pond turtle	SSC	Occurs in rivers, ponds, and freshwater marshes, and nests in upland areas (sandy banks or grassy open fields) up to 1,640 feet from water.	**High Potential**. Multiple extant CNDDB occurrences within 5 miles. Known to occur in Pacheco Creek. Harper Canyon Creek drains into this creek seasonally, and WPT may move into project area during this time. Suitable habitat present on site at the reservoir.
Rana boylii	Foothill yellow-legged frog	CE	Occurs in rocky, slow-moving streams with open canopy from Oregon to southern California and through the foothills of the Sierras.	**Unlikely**. Surveys for foothill yellow-legged frog were negative on the site in 2019. Suitable habitat is invaded by bullfrogs or dries down in summer. CNDDB occurrence No. 2074 (1950) documented collection of an adult off Highway 152, 20 miles east of Gilroy.

Table 3. Special-Status Animal Species with Potential to Occur on the Bourdet Ranch Project Site

Scientific Name	Common Name	Listing Status	Habitat Requirements	Potential for Occurrences
Fish				
Oncorhynchus mykiss irideus	Steelhead – South/Central California Coast DPS	FT, SSC	Occurs in fresh water, fast flowing, highly oxygenated, clear, cool streams where riffles tend to predominate pools; small streams with high elevation headwaters close to the ocean that have no impassible barriers; spawning and high elevation headwaters.	**No Potential**. No suitable habitat occurs on the project site. Harper Canyon Creek dries down annually. Project activities will be performed in summer months when river is dry and low-flow channel will be established and protected from work activities.
Hypomesus transpacificus	Delta smelt	FT, CE	Occurs over a wide salinity range, including estuarine waters and along the freshwater mixing zone. Just before spawning, migrate upstream from brackish water into river channels and tidally influenced sloughs, spawning in shallow, fresh, or slightly brackish water away from mixing zone.	**No Potential**. Delta smelt not known in Santa Clara County. No suitable habitat on the project site.
Birds				
Athene cunicularia hypugaea	Western burrowing owl	SSC	Prefers level, open, dry, heavily grazed, or low stature grassland or desert vegetation with available burrows.	**Unlikely**. Winter habitat present on upper reaches of property in open grassland where several BUOW have been observed; no habitat present in project area. No other records for species in area.
Agelaius tricolor	Tricolored blackbird	CT, SSC	Constructs nests in dense stands of tule, cattail, or other dense marshland vegetation. Requires protected nesting substrate and foraging areas within a few kilometers of the colony.	**Unlikely**. No suitable breeding habitat occurs on the project site. CNDDB occurrence No. 729 near Henry Coe State Park documented breeding in 2013. Suitable foraging habitat on site only.

Table 3. Special-Status Animal Species with Potential to Occur on the Bourdet Ranch Project Site

Scientific Name	Common Name	Listing Status	Habitat Requirements	Potential for Occurrences
Lanius ludiovicianus	Loggerhead shrike	SSC	Inhabits broken woodlands, savannah, pinyon-juniper, Joshua tree and riparian woodlands, desert oases, scrub, and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	**Present**. Multiple eBird detections of species along Highway 152. Nesting habitat occurs on project site. Previously observed on site. Pre-construction surveys will be conducted; see text.
Vireo bellii pusillus	Least Bell's vireo	FE, CE	Occurs as a summer resident of southern California in low riparian habitat in vicinity of water or in dry river bottoms below 2,000 feet in elevation. Nests along margins of bushes or on twigs projecting into pathways.	**Unlikely**. Occurrences not known within 5 miles; no suitable nesting habitat on site. Species presumed extirpated from area.
Gymnogyps californianus	California condor	FE, CE, FP	Scavenges for carrion in habitats ranging from Pacific beaches to mountain forests and meadows. Nests in caves on cliff faces in mountains up to 6,000 feet in elevation.	**No Potential**. No suitable habitat occurs on the project site. No known occurrences within 5 miles of project site.
Aquila chrysaetos	Golden eagle	FP/SSC	Utilizes rocky cliff faces for breeding, forages in open grassland for squirrels, rabbits, and other medium-sized mammals.	**High Potential**. GOEA have been documented within 1.5 miles of project area; multiple eBird records of species in vicinity observed from Highway 152. Suitable foraging and breeding habitat present on site.
Haliaeetus leucocephalus	Bald eagle	FP	Nests in large, prominent trees along rivers, streams, and reservoirs. Primarily preys on fish but will predate waterfowl.	**Moderate Potential**. Sightings along Pacheco Creek, which runs near the property, but no suitable breeding or foraging habitat is found on site. CNDDB occurrence No. 369-370 documents presence along Highway 152.

Table 3. Special-Status Animal Species with Potential to Occur on the Bourdet Ranch Project Site

Scientific Name	Common Name	Listing Status	Habitat Requirements	Potential for Occurrences
Falco mexicanus	Prairie falcon	SSC	Uses protected cliff faces and rocky substrate for nesting; forages in open grassland habitat.	**Moderate Potential**. Breeding and forging habitat present on site but not within the project area. No recent records of species in the vicinity. Various CNDDB occurrences of species in area, mostly from the 1970s.
Elanus leucurus	White-tailed kite	SSC	Year-round resident in coastal and valley lowlands with scattered trees and large shrubs, including grasslands, marshes, and agricultural areas. Nests in trees of various size and type. Primarily preys on small mammals and other vertebrates.	**Moderate Potential**. Open grasslands in between mixed oak woodland habitat present on site provides suitable foraging and breeding habitat. Various eBird sightings along Highway 152 from recent years.

Key to Status	
FE	Federally listed as endangered species
FT	Federally listed as threatened species
FC	Federally listed as a candidate species for listing
CE	California listed as endangered species
CT	California listed as threatened species
FP	California listed as fully protected
SSC	California species of special concern

5.4 Wetland Delineation

No wetland delineation has been conducted for this project, but it is proposed to occur prior to the formal regulatory permitting process.

5.5 Tree Inventory

On August 2 and August 4-6, 2021, ISA Certified Arborist Helena Trifillis (#WE-13228A) performed an inventory of the existing and removed trees in the areas identified as the "Project Area" and the "Violation Areas." Trees touching, overlapping, or within each "Violation Area" polygon were surveyed and recorded in the ArcGIS Collector app. Data were collected to address County comment 2c of the November 23, 2020, letter for PLN20-139 Grading Abatement Application, which states:

> *2c. Pre-violation of all existing trees identified with the location, common names, and sizes (measured 4.5 feet above grade), if the driplines of the subject trees extend into the unpermitted grading areas. Please also mark the trees being removed (see LDE comment #38 and HCP comment #21).*

The site was accessed partially by vehicle but mainly on foot, as not all the roads throughout the ranch were accessible by vehicle. A visual inspection of tree species was conducted to assess the condition of each tree, along with its common and scientific name and estimated height. Diameter at breast height (DBH), maximum crown spread, and GPS location were also measured for each tree within the polygons. Tree DBH was taken for all individual trees that could be measured at breast height, following ISA standard practices. Measurements were taken using a Forestry Suppliers, Inc. metal DBH tape. For multi-stemmed trees stemming at or below the ground, DBH was collected by measuring the diameter of the largest trunk and one half of the cumulative diameter of the remaining trunks. Stems smaller than 1.0 inch at 1.0 foot above the measuring point were excluded from calculations. Trees or stems that forked or branched between 1.0 foot and 4.5 feet were measured at the narrowest point below the fork, below any associated swelling.

Maximum crown spread was collected via both visual observation and standard arborist field measurements taken by placing a 300-foot measuring tape against the trunk and reading out to the longest branch (drip line) of the tree to record the crown radius. Radii were then multiplied by two to determine crown diameter. Spread of abnormally shaped crowns was measured from drip line to drip line using a measuring tape. Crown spread measurements represent the maximum, or widest, crown spread. The DBH and crown spread measurements for trees that could not be physically accessed due to poison oak encroachment or other safety hazards, such as dense vegetation or a steep, inaccessible slope, were visually estimated. Each estimated value was recorded as "estimated" in the notes for the corresponding tree.

The arborist conducted a Level 1 and Level 2 assessment to determine the condition of each tree. The Level 1 assessment involved a broader visual inspection of the tree as a whole, noting the branching structure, overall bark condition, crown spread, coloration, and fullness, as well as the location of the

tree in relation to sunlight, water features, and proximity to other trees. The Level 2 assessment was conducted from a closer vantage point and involved more in-depth analysis of root conditions, bark conditions, and presence of any cavities or other abnormalities. The height of each tree was estimated by standing at a distance and holding a physical object such as a stick to estimate the height of 10 feet from the base and then increasing by increments of 10, and then 5, moving up the tree. Each height was estimated to the nearest 5 feet. Field data, including common name, species name, condition, DBH, crown spread, height, and additional notes on condition and tree stem count, was recorded using a mobile phone with the ArcGIS Collector app that creates a data point for each tree. The accuracy of the GPS location of each tree was enhanced using the sub-meter SI Blue II+ GPS device. GPS accuracy was measured within a 9-meter range. Full results of the tree inventory – for existing trees – are provided in Appendix E. Documentation of removed trees, pre-violation, is provided in Appendix F including a description of the methods used to make the assessments on species and size after-the-fact.

5.6 Habitat Assessments

During project surveys, biologists scanned for special-status species and/or suitable habitat for these species, including for CRLF, CTS, foothill yellow-legged frog (*Rana boylii*), western burrowing owl (BUOW; *Athene cunicularia hypugaea*), San Joaquin kit fox (SJKF; *Vulpes macrotis mutica*), least Bell's vireo (*Vireo bellii pusillus*), tricolored blackbird (*Aegelaius tricolor*), and western pond turtle (WPT; *Emys marmorata*), among others. Any special-status species or suitable habitat was documented. In addition, Sequoia biologists mapped boundaries of plant communities, as shown on Figure 3. The map book that includes the full range of habitat plan and land cover types can be found in Appendix K, including species survey areas.

On September 9, 2020, Sequoia staff conducted a survey of the project site in the vicinity of the grading violation areas and characterized vegetation present. During the survey, the biologists also documented plant and wildlife species observed on the project site. Nomenclature used for plant names follows *The Jepson Manual* (Baldwin et al. 2012), while nomenclature used for wildlife follows CDFW's *Complete List of Amphibian, Reptile, Bird, and Mammal Species in California* (2016). As shown on Figure 3, 10 plant communities were mapped on the project site (Sawyer and Keeler-Wolf 1995) and are described below. The verified HCP landcover map found in the Bourdet Ranch 2018 Botanical Resources Report (Sequoia 2018) was used to describe landcover in impact areas, along with the ground-truthed data collected on site on September 9, 2020. A Santa Clara Valley Habitat Plan landcover map is also provided in Appendix K.

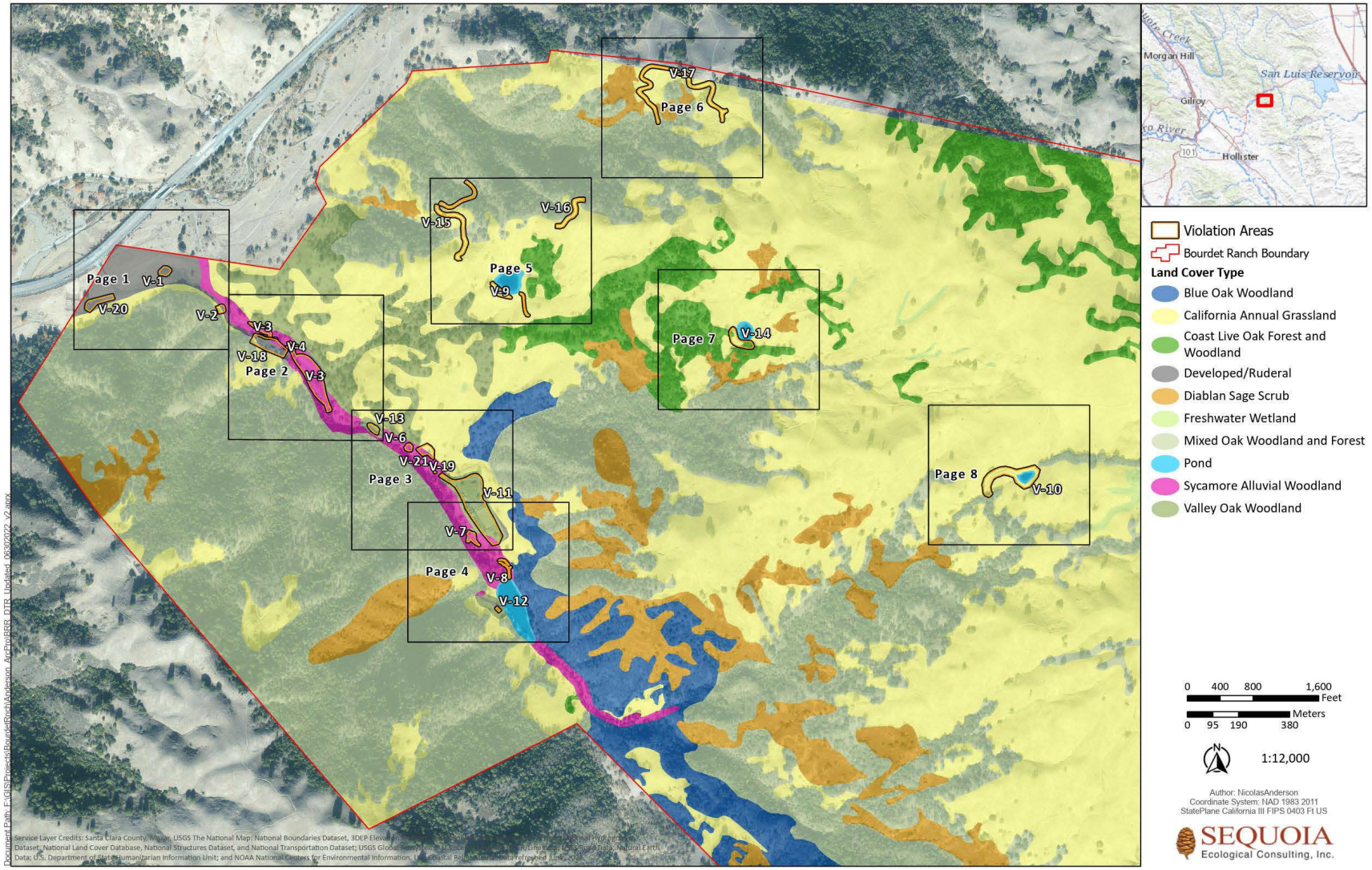


Figure 3. Valley Habitat Plan Land Cover Types Found on Bourdet Ranch and in Violation Areas

5.6.1 Potential to Occur

Following the site assessment, potential for special-status species to occur in the project area was evaluated according to the following criteria:

- ***No Potential***. Habitat on and adjacent to the site is clearly unsuitable for the species' requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).
- ***Unlikely***. Few of the habitat components meeting the species' requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
- ***Moderate Potential***. Some of the habitat components meeting the species' requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- ***High Potential***. All of the habitat components meeting the species' requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- ***Present***. Species observed or recorded (i.e., CNDDB, other reports) on the site recently.

6.0 RESULTS

The results of the desktop review and site assessment conducted in July 2021 are presented below.

6.1 Hydrology

Sequoia reviewed USFWS NWI and USGS National Hydrography Dataset (NHD) geodata for the presence of streams, ponds and wetlands on Bourdet Ranch and identified an abundance of freshwater emergent wetlands and ponds, predominantly located adjacent to and on top of ridgelines extending southward and westward from Pacheco Peak, the dominant peak of the region (Figures 4 and 5).

The principal hydrologic sources for the project area are direct precipitation, surface sheet flow and shallow sub-surface flow from surrounding uplands, groundwater discharge in headwater and instream springs, and drainage through unnamed ephemeral or intermittent drainages in Harper Canyon and other tributaries in the Pacheco Creek watershed. Numerous unnamed drainages were mapped on the study area in the NHD (Figure 5). These drainages drain generally west or northwest to Pacheco Creek, a perennial watercourse located approximately 500 to 1,000 feet northwest of the project. Along the valley floor of Harper Canyon lies Harper Canyon Creek, a seasonal tributary to Pacheco Creek. Harper Canyon Creek is approximately 1.16 miles long and is impounded at the southern (upstream) end of the valley floor by a man-made dam resulting in a permanent reservoir having approximate dimensions of 190 by 497 feet. Harper Canyon Creek is seasonal and fed by five mapped ephemeral and intermittent tributaries within the watershed. Pacheco Creek drains southwest into the Pajaro River, which discharges into Monterey Bay.

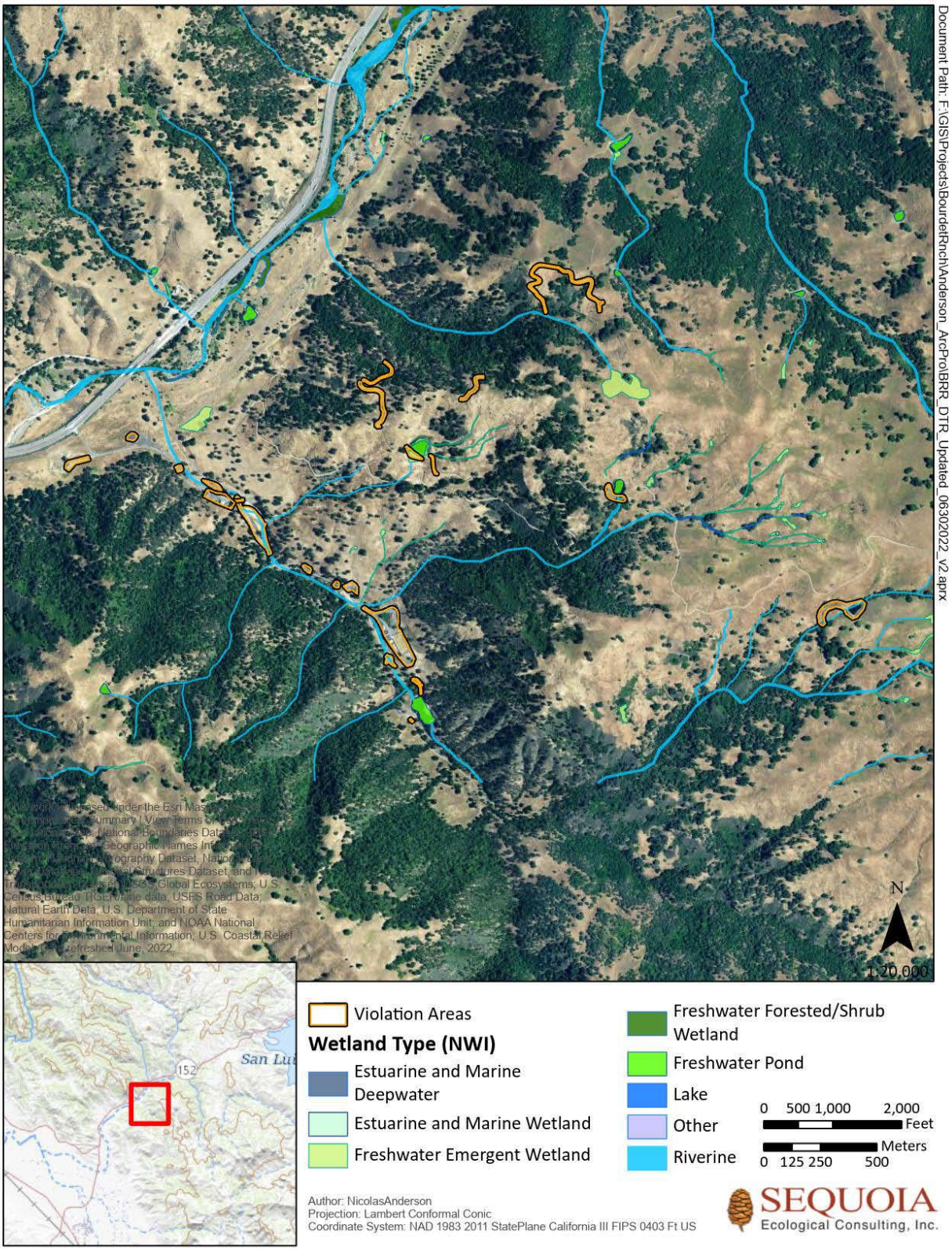


Figure 4. Occurrences of NWI Wetland Types and Waterways within the Project Area

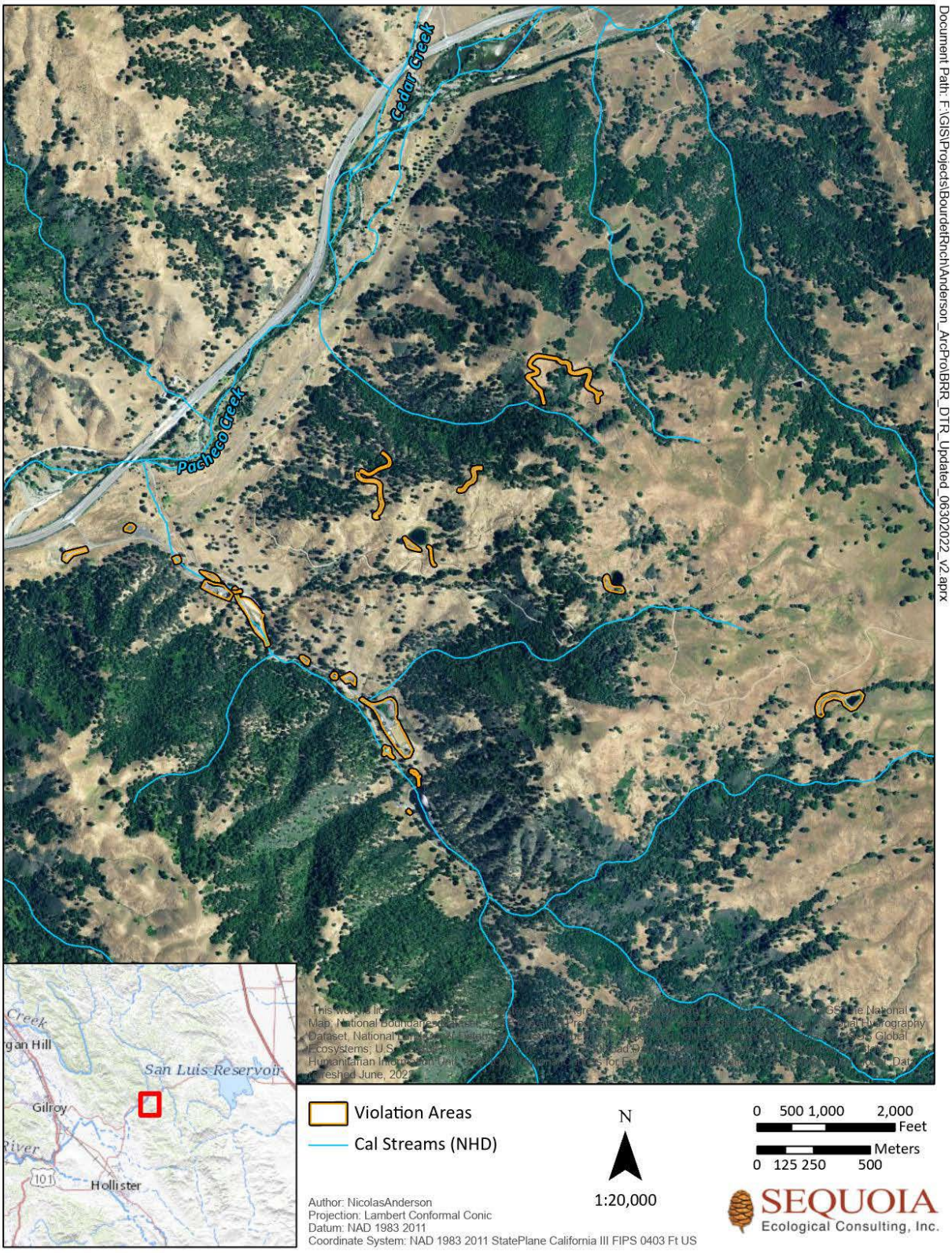


Figure 5. National Hydrography Dataset Map of the Project Area

6.2 Topography, Geology, and Existing Soils

The project area consists primarily of rugged terrain in the Diablo Range, the easternmost chain of the central California Coast Ranges, with moderate to high slope gradients. The Bourdet Ranch home is sited within the valley floor of Harper Canyon on the southwestern side of the project area, alongside Harper Creek, a tributary to Pacheco Creek (located north of the study area). The valley floor ranges from 310 feet in elevation at its lowest point to approximately 470 feet at its highest. A steeply sloped ridgeline is located west of the valley, rising to a maximum elevation of approximately 1,490 feet. South and east of the valley floor are steep canyon walls, divides, and ridgelines that converge in the northeast corner of the study area at Pacheco Peak, at an elevation of approximately 2,758 feet. Various drainages run east to west through the south and east ridges, which feed into Harper Creek and eventually discharge to Pacheco Creek.

Bourdet Ranch lies within the geologically mapped area that extends approximately 2.5 miles west of the Diablo Range crest, and contains the largest exposure of high-pressure, low-temperature metamorphic rocks in the coterminous United States, consisting of the most accessible tract of coherent Franciscan metasedimentary rocks in the Coast Ranges (Ernst 1993). Sequoia reviewed the USGS National Geological Map Database to identify the geological composition of the project area. The project area is comprised mostly of graywacke sandstone and various patches of gougy claystone and graywacke mixtures. There are intermittent areas of landslide rubble in moderate to steeply sloped areas. The tributary and floodplain to Pacheco Creek is entirely alluvial gravel, sand, and clay.

Five soil types have been mapped on the project area (NRCS 2021). These soil types are described below in Table 4. A soil map of the project area is provided in Figure 6.

Table 4. Soils Mapped on the Project Area in NRCS (2021)

Soil Type	Description	Acre(s)	Percent of Area of Interest (AOI)
CoB—Cortina very gravelly loam, 0 to 5 percent slopes, MLRA 15	Somewhat excessively drained, derived from gravelly alluvium from metamorphic and sedimentary rock, and found on floodplains. A typical profile consists of very gravelly loam from 0 to 8 inches, extremely gravelly fine sandy loam from 8 to 28 inches, and extremely gravelly sandy loam from 28 to 60 inches. The depth to water table and a restrictive feature are >80 inches.	4.2	27.1
GbB—Garretson gravelly loam, 0 to 5 percent slopes	Well drained, derived from alluvium, and found on alluvial fans and stream terraces. A typical profile consists of gravelly loam from 0 to 6 inches and gravelly loam and/or gravelly clay loam from 6 to 60 inches. The depth to water table and a restrictive feature are >80 inches.	0.8	5.1

Table 4. Soils Mapped on the Project Area in NRCS (2021)

Soil Type	Description	Acre(s)	Percent of Area of Interest (AOI)
InG2—Inks rocky clay loam, 50 to 75 percent slopes, eroded	Well drained, derived from residuum weathered from basalt, and found on mountain slopes. A typical profile consists of gravelly clay loam from 0 to 15 inches and un-weathered bedrock from 15 to 19 inches. The depth to water table is >80 inches, and the depth to a restrictive feature (lithic bedrock) is 11 to 19 inches.	0.7	4.2
VaE2—Vallecitos rocky loam, 15 to 30 percent slopes, eroded	Well drained, derived from residuum weathered from shale, and found on mountains. A typical profile consists of loam from 0 to 10 inches, clay from 10 to 19 inches, and bedrock from 19 to 23 inches. The depth to water table is >80 inches, and the depth to a restrictive feature (lithic bedrock) is 16 to 30 inches.	8.6	55.4
VaG2—Vallecitos loam, 30 to 75 percent slopes, eroded, MLRA 15	Well drained, derived from residuum weathered from shale, and found on ridges, mountain slopes, and hillslopes. A typical profile consists of loam from 0 to 10 inches, clay loam from 10 to 16 inches, and bedrock from 16 to 26 inches. The depth to water table is >80 inches, and the depth to a restrictive feature (lithic bedrock) is 12 to 24 inches.	1.3	8.3
	Totals for Project Area	**15.6**	**100%**

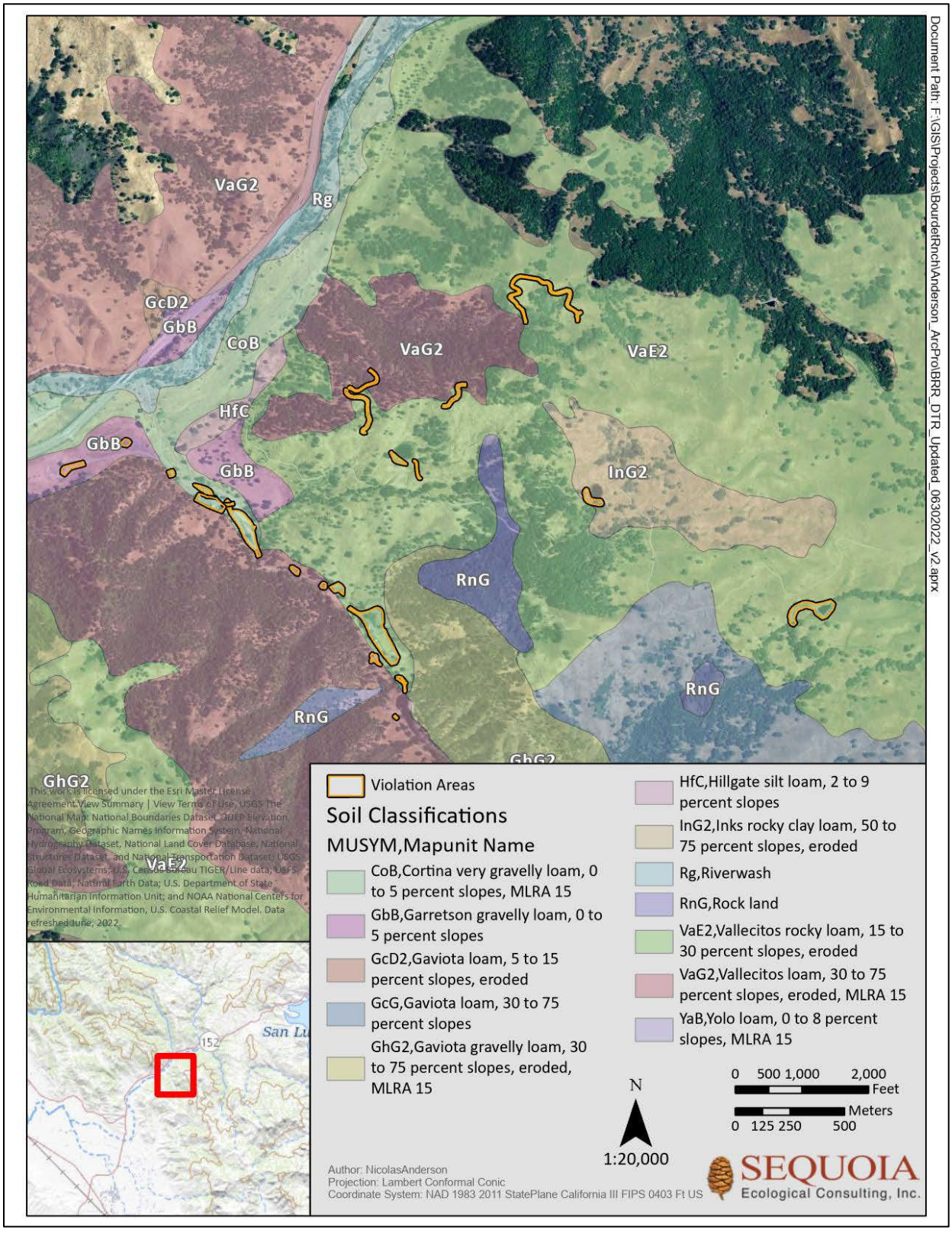


Figure 6. NRCS Soil Map of the Project Area

6.3 Tree Inventory

A total of 167 trees and eight unique species were assessed within the project area. Tree species on site consisted of native trees of various diameters, ranging from 2 to 85 inches. The eight unique species found within the violation polygons were as follows: western sycamore (*Platanus racemosa*), California buckeye (*Aesculus californica*), arroyo willow (*Salix lasiolepis*), elderberry (*Sambucus nigra*), California bay (*Umbellularia californica*), coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), and blue oak (*Quercus douglasii*). The trees in the project area demonstrated varying health conditions. Some had major cavities or broken branches, some were on cut slopes with broken and/or exposed roots, and some were completely dead with 100% brown leaves or no leaves. For the most part, even the trees with defects (aside from the dead trees) had green canopies overall with minimal crown dieback. The trees with the largest DBH and healthiest appearance were located farthest from the road; these were typically stand-alone trees that did not have to compete with other trees for sunlight or space. The trees closer to the road and on slopes where the road was cut into the mountainside still appeared to be healthy, but their roots were truncated and broken on the side where the road was cut. In the riparian areas, the trees were more densely packed together. A full inventory of trees mapped in the project area is included as Appendix E.

Sequoia documented that a total of 38 trees were removed, as compared to pre-violation conditions (Appendices E and F). Trees removed include western sycamore, valley oak, coast live oak, blue oak and unknown trees that could not be directly assessed as stumps were removed and aerial imagery was not sufficient to identify to species. However, the surrounding canopy of unknown trees was documented and found to be consistent with the known species removed, along with California bay laurel.

6.4 Plant Communities and Wildlife Habitats

On September 9, 2020, Sequoia staff conducted a survey of the project site in the vicinity of the grading violation areas and characterized vegetation present. During the survey, the biologists also documented plant and wildlife species observed on the project site; these are included in Appendices A and B. Nomenclature used for plant names follows *The Jepson Manual* (Baldwin et al. 2012), while nomenclature used for wildlife follows CDFW's *Complete List of Amphibian, Reptile, Bird, and Mammal Species in California* (2016). As shown on Figure 3, nine plant communities were mapped on the project site within violation areas (Sawyer and Keeler-Wolf 1995; Santa Clara Valley HCP [ICF 2012]) and are described below. Where terminology in vegetation cover differed between Sawyer and Keeler-Wolf (1995) and the SCVHP, the nomenclature adopted by the SCVHP took precedence and was used for consistency with the plan. The verified HCP landcover map found in the Bourdet Ranch 2018 Botanical Resources Assessment (Sequoia 2018) was used to describe landcover in impact areas. Acreages were calculated in ArcGIS for each impacted habitat, impact type, and HCP-specified buffer (50-foot buffer for permanent and 10-foot buffer for temporary) and are summarized as an inset table in Appendix K. Impact fees for the project design are provided in Appendix L, per total impacts from Appendix K.

6.4.1 Central California Sycamore Alluvial Woodland

Central California sycamore alluvial woodland habitat occurs along the Harper Creek drainage within the impact area. This habitat is characterized by mature western sycamore (*Plantanus racemosa*) trees with large, well-spaced crowns. The landscape position is characterized by broad, alluvial floodplains on the valley floor along low-gradient streams. Within the property, this habitat is an open-canopy woodland dominated by mature western sycamores, with bigleaf maple (*Acer macrophyllum*), occasional willows (*Salix* sp.), California bay, and oak species, including valley oak and coast live oak. Herbaceous and shrubby species present include mulefat (*Baccharis salicifolia*), mugwort (*Artemesia douglasiana*), California blackberry (*Rubus ursinus*), California rose (*Rosa californica*), seep and cardinal monkeyflowers (*Mimulus guttatus* and *M. cardinalis*), and rabbitsfoot grass (*Polypogon monspeliensis*). Understory within this habitat type typically does not grow densely, as high winter flow typically inhibits growth for many herbaceous species within the channel. Impacts to this habitat type within the parcel will include channel grading to restore the natural channel and floodplain complex, construction of a concrete bridge to replace an existing bridge, and addition and replacement of culverts as needed. Work will occur in sycamore alluvial woodland habitat at V-2, V-3, V-4, V-5, V-6, V-7, V-18, V-19 and V-21.

The proposed grading design plan (Appendix I) will allow the floodplain surface to become more frequently inundated along the banks to encourage recruitment of sycamore trees. The biological benefit due to project impacts from this action (sycamore alluvial woodland habitat restoration) would contribute to increased habitat for a variety of bird and wildlife species, including creation of nesting and foraging habitat, and increased ecosystem function along the floodplain. Sycamores are also able to thrive in hot summer conditions with low water or intermittent flows (Grossinger et al. 2008). Sycamore alluvial woodland habitat is considered a sensitive biotic community (CDFW 2021). In general, sycamore alluvial woodland habitat is rare; much of the prior existing habitat was lost due to land conversion and the addition of dams and removal of floodplains and influence of regular flooding events (Keeler-Wolf et al. 1996) and conservation and restoration of this habitat type is a priority for many regions already (San Francisco Estuary Institute-Aquatic Science Center and H.T. Harvey 2018). Stream restoration could potentially reestablish natural stream benches and associated sycamore riparian habitat as part of natural flood protection efforts (Grossinger et al. 2008), which may be important to help curb effects of major precipitation and flooding events due to climate change.

Common wildlife species that are likely to occur within central California sycamore alluvial woodland habitat include: ash-throated flycatcher (*Myiachus cinerascens*), yellow-billed magpie (*Pica nuttalli*), and valley garter snake (*Thamnophis sirtalis*). Historically, California red-legged frog and western pond turtle may be found in this land cover type year-round, but neither species have been observed onsite during any field visit.

A total of 3.31 acres of temporary impacts and 0.34 acres of permanent impacts will occur on sycamore alluvial woodland habitat (Appendix K).

6.4.2 California Annual Grassland

California annual grassland habitat is an herbaceous plant community dominated by non-native annual grasses and forbs adapted to disturbance, including grass species such as *Avena* (*A. barbata*), *Bromus* (*B. hordeaceus, B. diandrus, and B. madritensis*), and thistles (Italian thistle, *Carduus pycnocephalus*; bull thistle, *Cirsium vulgare*; and yellow star-thistle, *Centaurea solstitialis*). Native species also occur, including grasses such as blue wildrye (*Elymus glaucus*) and purple needlegrass (*Stipa pulchra*), and forbs such as hayfield tarweed (*Hemizonia congesta*), soap plant (*Chlorogalum pomeridianum*), slender tarweed (*Madia gracilis*), and gumplant (*Grindelia* sp.). This habitat type dominates where woody cover is absent throughout the property, including in areas north, west, and east of where grading violations occurred. Impacts to this habitat type will include grading to restore impacts incurred from the grading violation. Violation areas found in this habitat type include V-2, V-9, V-10, V-11, V-14, V-15, V-16, V-17, V-18, and V-21. Note that at V-10, California annual grassland habitat was converted into pond habitat and was calculated as a temporary impact.

Common wildlife species observed within California annual grassland communities on the project site include western meadowlark (*Sturnella neglecta*), horned lark (*Eremophila alpestris*), house finch (*Carpodacus mexicanus*), western fence lizard (*Sceloporus occidentalis*), mule deer (*Odocoileus hemionus* ssp. c*olumbianus*), and California ground squirrel (*Otospermophilus beecheyi*).

The California annual grassland community accounts for approximately 5.37 acres on the project site consisting of 0.90 acres of permanent impacts and 4.47 acres of temporary impacts (Appendix K).

6.4.3 Diablan Sage Scrub

Within the project area, Diablan sage scrub occurs on steep, dry slopes, and is primarily composed of California sage (*Artemesia californica*) alliance. Co-dominant species within the project area include coyotebrush (*Baccharis pilularis*), sticky monkeyflower (*Mimulus aurantaicus*), blue elderberry (*Sambucus niger*), toyon (*Heteromeles arbutifolia*), chia (*Salvia columbariae*), buckwheat (*Eriogonum* sp.), poison oak (*Toxicodendron diversilobum*), and spiny redberry (*Rhamnus crocea*). Diablan sage scrub habitat is located in the northeast portion of the project area (V-17), adjacent to an existing dirt road that will be removed and restored to pre-project conditions; a portion of this road occurs adjacent to Diablan sage scrub, but no impacts to this habitat type are anticipated. No serpentine rocky outcrops, which provide habitat for many SCVHP-covered or other rare plant species, were observed over multiple field outings to the area.

Common wildlife species observed within Diablan sage scrub communities on the project site include wrentit (*Chamaea fasciata*), California quail (*Callipepla californica*), California scrub-jay (*Aphelocoma californica),* white-crowned sparrow (*Zonotrichia leucophrys*), and Audubon's cottontail (*Sylvilagus audubonii*).

The Diablan sage scrub community accounts for approximately 0.06 square feet of temporary impacts (Appendix K).

6.4.4 Mixed Oak Woodland and Forest

Mixed oak woodland and forest occurs immediately west of the impacted area within Harper Creek Canyon within mesic areas and is composed mainly of the *Quercus agrifolia* woodland alliance and *Quercus lobata* woodland alliance. This habitat type features a mostly closed canopy and can support dense vegetation in some instances. Mixed oak woodland and forest in the study area is dominated by coast live oak, valley oak, blue oak, California bay, and California buckeye. The understory is composed of a mixture of shrubs and forbs/herbaceous species, including poison oak, coyote brush, sticky monkeyflower, oceanspray (*Holodiscus discolor*), California coffeeberry (*Frangula californica*), pink honeysuckle (*Lonicera hispidula*), and wood fern (*Dryopteris arguta*), along with grasses and forbs described for California annual grassland. Impacts to this habitat type were observed with grading along the access road at V-15, V-16, and V-17. Impacts at V-15, V-16, and V-17 will be reverted, and will include grading to pre-violation conditions.

Common wildlife species observed within mixed oak woodland and forest communities on the project site include spotted towhee (*Pipilo maculatus*), bushtit (*Psaltriparius minimus*), red-shouldered hawk (*Buteo lineatus*), western gray squirrel (*Sciurus griseus*), and raccoon (*Procyon lotor*).

The mixed oak woodland community accounts for approximately 0.96 acres on the project site, 0.05 acre of which is permanent impacts (Appendix K).

6.4.5 Valley Oak Woodland

Valley oak woodland is composed of the *Quercus lobata* woodland alliance and is considered a sensitive biotic community by CDFW. It is dominated by a canopy of valley oak, with an understory consisting primarily of native and non-native grasses and forbs described for California annual grassland. Some grading violations occurred within this habitat type, including the unpermitted addition of buildings and horse facilities (e.g., arena, corrals) along with unpermitted culverts under an improved road that have not been evaluated for jurisdictional status. Work should adhere to Condition 14 within the SCVHP. Impacts to valley oak woodland occurred at V-6, V-11, V-13, V-19, and include grading and site development and culvert install. These impacts are set to be legalized.

Common wildlife species observed within valley oak woodland on the project site include acorn woodpecker (*Melanerpes formicivorous*), mourning dove (*Zenaida macroura*), and red-tailed hawk (*Buteo jamaicensis*).

The valley oak woodland community accounts for approximately 4.94 acres on the project site, 4.92 acres of which are permanent impacts (set to be legalized) and 0.02 acre is temporary impacts (Appendix K).

6.4.6 Pond

Pond/open water habitat was present throughout the property. A new stock pond (V-10) created between March 2013 and April 2015 is approximately 0.5 acre and resulted in significant erosion of upland habitat from diverted water flows from the original natural channel to form a deep gully. Restoration of the eroded gully will be included with Pond V-10 restoration; the addition of this pond created an unstable area from the pond's outlet, causing significant erosion and instability of the surrounding area. Surrounding habitat of pond V-10 is

consistent with both California annual grassland and mixed oak woodland and forest. This pond's average depth measured 10 feet with a maximum depth of over 15 feet. During the June 18, 2019, site visit, the pond measured approximately 197 by 118 feet, was almost at capacity, and was mostly clear of emergent vegetation except for a patch of *Typha latifolia* along the northeastern edge. During the September 9, 2020, field visit, Eurasian watermilfoil (*Myriophyllum spicatum)* was observed throughout the pond. The permanent pond at V-14 was also mostly clear of emergent vegetation except for patches of spike rush (*Juncus* sp.) along the edges, with surrounding habitat of mixed oak woodland and forest, and California annual grassland. The pond measured approximately 200 by 180 feet during the June 2019 field survey, and depth was estimated at 10 feet or more. American bullfrogs were present in large numbers at both ponds. Pond V-14 only will be legalized.

Common wildlife species observed within the pond community on the project site included American bullfrog, valley garter snake, black phoebe (*Sayornis nigricans*), and mallard (*Anas platyrhyncos*).

The pond community accounts for approximately 0.3 acre of permanent impacts and 0.64 acre of temporary impacts on the project site (Appendix K).

6.4.7 Blue Oak Woodland

Blue oak woodland habitat is highly variable within Santa Clara County; occurring as single-species canopy with no shrub understory or occurring as a mixed overstory stand with a diverse shrub understory. It typically occurs in the thin soils of dry foothills on south-facing slopes. Blue oak woodland is dominated by blue oak (*Quercus douglasii*), a drought-tolerant and fire-resistant species. When blue, valley, and coast live oak occur together, blue oak woodland is considered a sensitive community by CDFG. Coffeeberry (*Rhamnus californica*), hollyleaf cherry (*Prunus ilicifolia*), and poison oak (*Toxicodendron diversilobum*) are species commonly found in this habitat type. Because blue oak is a slow-growing species, the biggest threat to blue oak woodland is development. Blue oak woodland occurs south and east of the project area, adjacent to V-8 and slightly overlapping at V-14. No impacts are expected to occur in blue oak woodland habitat during project implementation, as work near this habitat type will include legalization of existing violations (V-14) or working in the stream channel at V-8.

Common wildlife species likely to occur within the blue oak woodland community include mule deer (*Odocoileus hemionus*), California myotis (*Myotis californicus*), and California towhee (*Pipilo crissalis*).

The blue oak woodland community accounts for approximately 0.004 acre of permanent impacts on the project site (Appendix K).

6.4.8 Developed/Ruderal

Developed and rural habitat is characterized by geometric shapes, structures, and landscaping. Most vegetation found in this habitat consists of non-native or cultivated plant species. Because developed areas are largely covered by impermeable surfaces, species of concern are unlikely to occur in the densely developed areas. Conversely, rural areas are more open and provide some habitat for wildlife and often incorporate ranching infrastructure such as corrals for livestock. Developed and rural areas typically contain landscaping, irrigated lands, or small pastures. Within the project area, ruderal and developed habitat encompasses areas associated

with the housing and livestock structures and associated landscaping at V-1, V-11, V-18, and V-21.

Common wildlife species like to occur within developed and rural habitats include American robin (*Turdus migratorius*), northern mockingbird (*Mimus polyglottos*), California ground squirrel (*Otospermophilus beecheyi*), and western fence lizard (*Sceloporus occidentalis*).

The developed/ruderal community accounts for approximately 1.97 acres on the project site, 1.65 acres of which are permanent impacts and 0.32 acres of temporary impacts.

6.4.9 Coast Live Oak Woodland and Forest

Coast live oak woodland and forest habitat is identified by a closed canopy and maintains its green foliage year-round. Coast live oak (*Quercus agrifolia*) and California bay laurel (*Umbellularia californica*) are dominant species within this plant community. Coast live oak woodland and forest is commonly found on steep, north-facing valley slopes and valley bottoms and adjacent to annual grasslands or other oak woodland types. An abundant understory community lives in association with this habitat, including coffeeberry (*Rhamnus californica*), California sagebrush (*Artemisia californica*), redberry buckthorn (*Rhamnus crocea*), bugle hedgenettle (*Stachys ajugoides*), and California blackberry (*Rubus ursinus*). Within the project area, coast live oak woodland and forest can be found around V-14, and near V-9.

Common wildlife species likely to occur within coast live oak woodland and forest include acorn woodpecker (*Melanerpes formicivorus*), dusky-footed woodrat (*Neotoma fuscipes*), and ring-necked snake (*Diadophis punctatus*).

The coast live oak woodland and forest community accounts for approximately 0.29 acre of permanent impacts on the project site (Appendix K).

6.5 Wildlife Corridors

Wildlife corridors are habitats that provide connectivity between natural communities otherwise separated by urbanization and other development. Wildlife corridors provide access for animals to travel between these communities for seasonal migration, access to overwintering/summering habitat, breeding, etc. They also allow animals a route to move away from natural disasters and other forms of habitat loss, as well as to recolonize habitats previously extirpated. Wildlife corridors provide opportunities to breed, migrate/emigrate, disperse, and forage (Beier and Loe 1992).

The proposed project will not interfere with the movement of native wildlife. This project will restore creek habitat within a rural, largely undeveloped setting, and no impacts to wildlife corridors or movement will be incurred. Work within Harper Canyon Creek will commence when it is naturally dry in the summer months, and no disruption to aquatic wildlife will occur. No species barriers will be in place that will disrupt natural movement or migration of species.

Figure 7 shows the results of the California Fish Passage Assessment Database (PAD). Multiple unassessed and natural partial barriers to fish passage were observed in the database review. No barriers were observed between Pacheco Creek and Harper Canyon Creek. Results are provided as Figure 7.

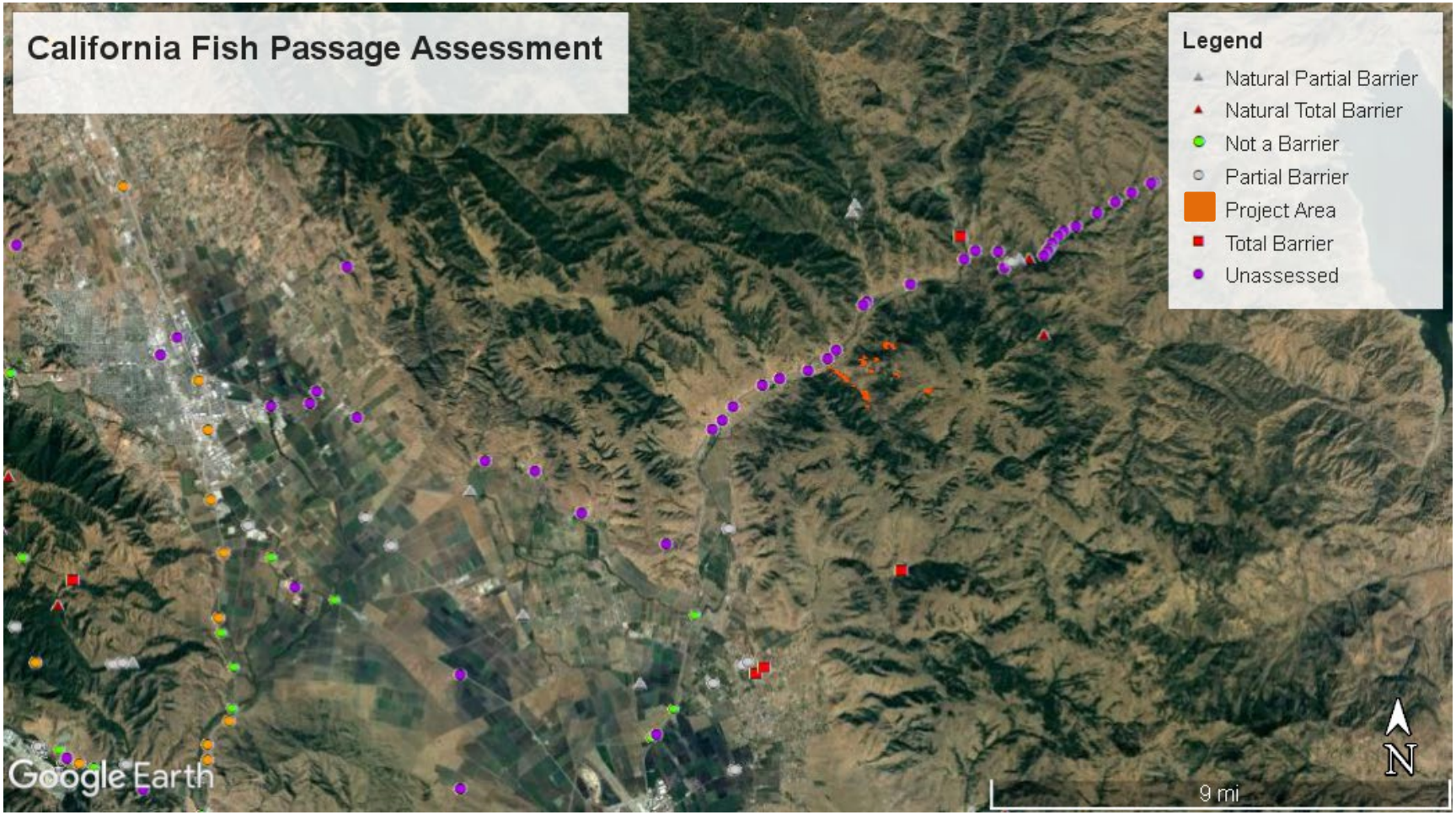


Figure 7. California Fish Passage Assessment Database Results

6.6 Special-Status Plants

Figures 8 and 9 provide a graphical representation of special-status plant species occurrences within 5 miles and 1 mile of the project site, respectively. Table 2 provides an assessment of the potential for special-status plant species to occur on the project site. Additionally, the County of Santa Clara Planning Department identified nine serpentine plant species to evaluate for potential impacts within the project area: smooth lessingia (*Lessingia micradenia* var. *glabrata*), fragrant fritillary (*Fritillaria liliacea*), Metcalf Canyon jewelflower (*Streptanthus albidus*), most beautiful jewelflower (*Streptanthus albidus* ssp. *peramoenus*), Tiburon Indian paintbrush (*Castilleja affinis* var. *neglecta*), coyote ceanothus (*Ceanothus ferrisia*), Santa Clara Valley dudleya (*Dudleya abramsii* ssp. *setchellii*), Mt. Hamilton thistle (*Cirsium fontinale* var. *campylon*), and Loma Prieta hoita (*Hoita strobilina*) (County of Santa Clara 2020).

Several species of special-status plants have been previously documented within 5 miles of the project site; however, no special-status plants have been observed or mapped on the project area itself. Sequoia analyzed the potential to occur for these plant species, as well as species included in CNPS and IPaC resource lists during the desktop review (Table 2). A number of these species require specialized habitats such as playas, vernal pools, seeps, and serpentinite soils that are not found on the project site. Due to lack of suitable habitat and/or lack of known/recent occurrences in the project vicinity, a total of 21 special-status plant species are not expected to occur and are therefore not discussed further in this analysis: coyote ceanothus, chaparral harebell, Hoover's button-celery, spiny-sepaled button-celery, San Joaquin spearscale, vernal barley, Mt. Hamilton coreopsis, smooth lessingia, arcuate bush-mallow, woodland woolythreads, Lime Ridge navarretia, shining navarretia, prostrate vernal pool navarretia, hairless popcornflower, saline clover, fragrant fritillary, Metcalf Canyon jewelflower, most beautiful jewelflower, Tiburon Indian paintbrush, Mt. Hamilton thistle, and Loma Prieta hoita (Table 2).
Due to potentially suitable habitat on the project site and known occurrences in the vicinity of the project site, three special-status plant species are assessed in more detail below for potential to occur on the project site.

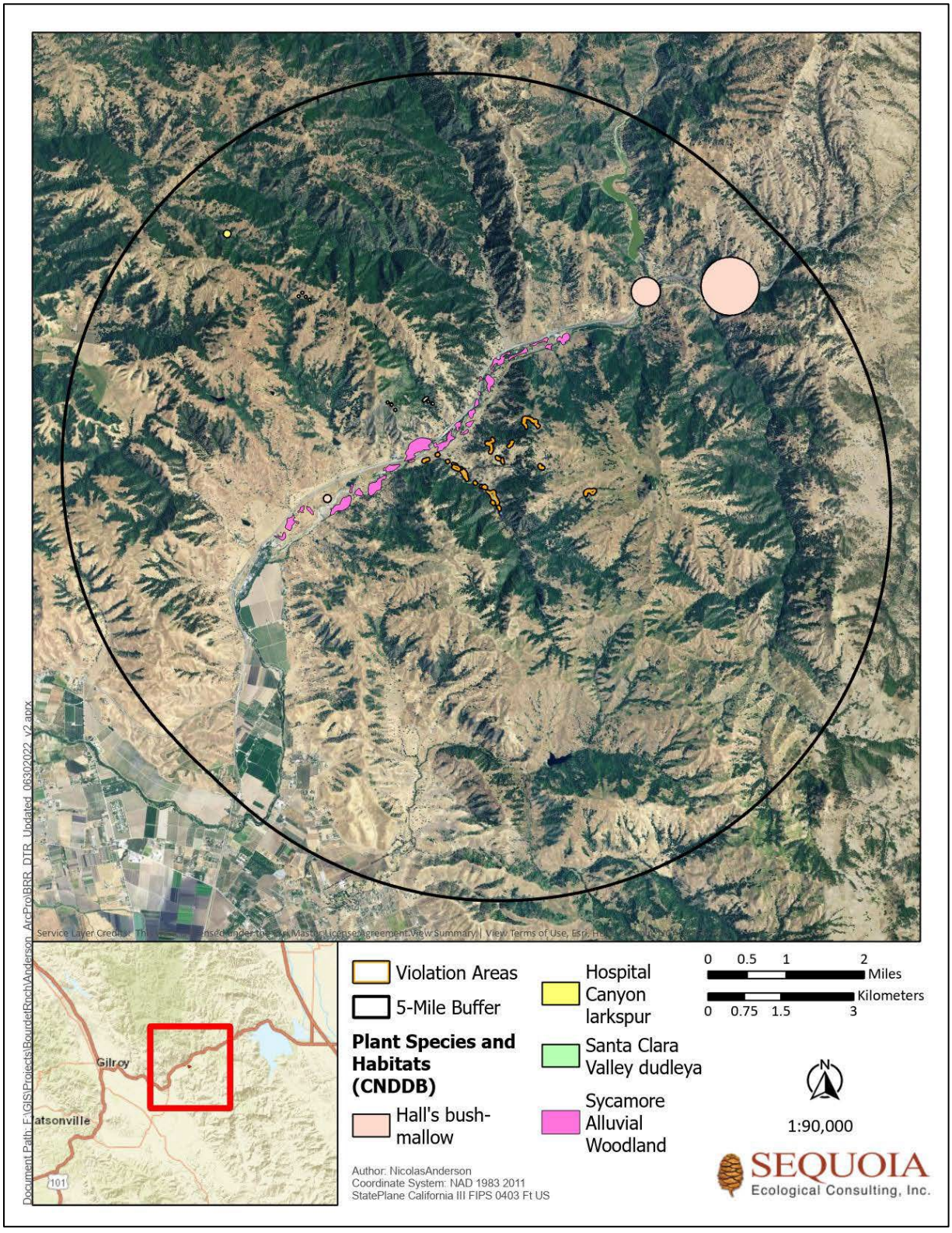


Figure 8. Closest Known Records of Special-Status Plants and CNDDB Sensitive Communities Within 5 Miles of the Project Area

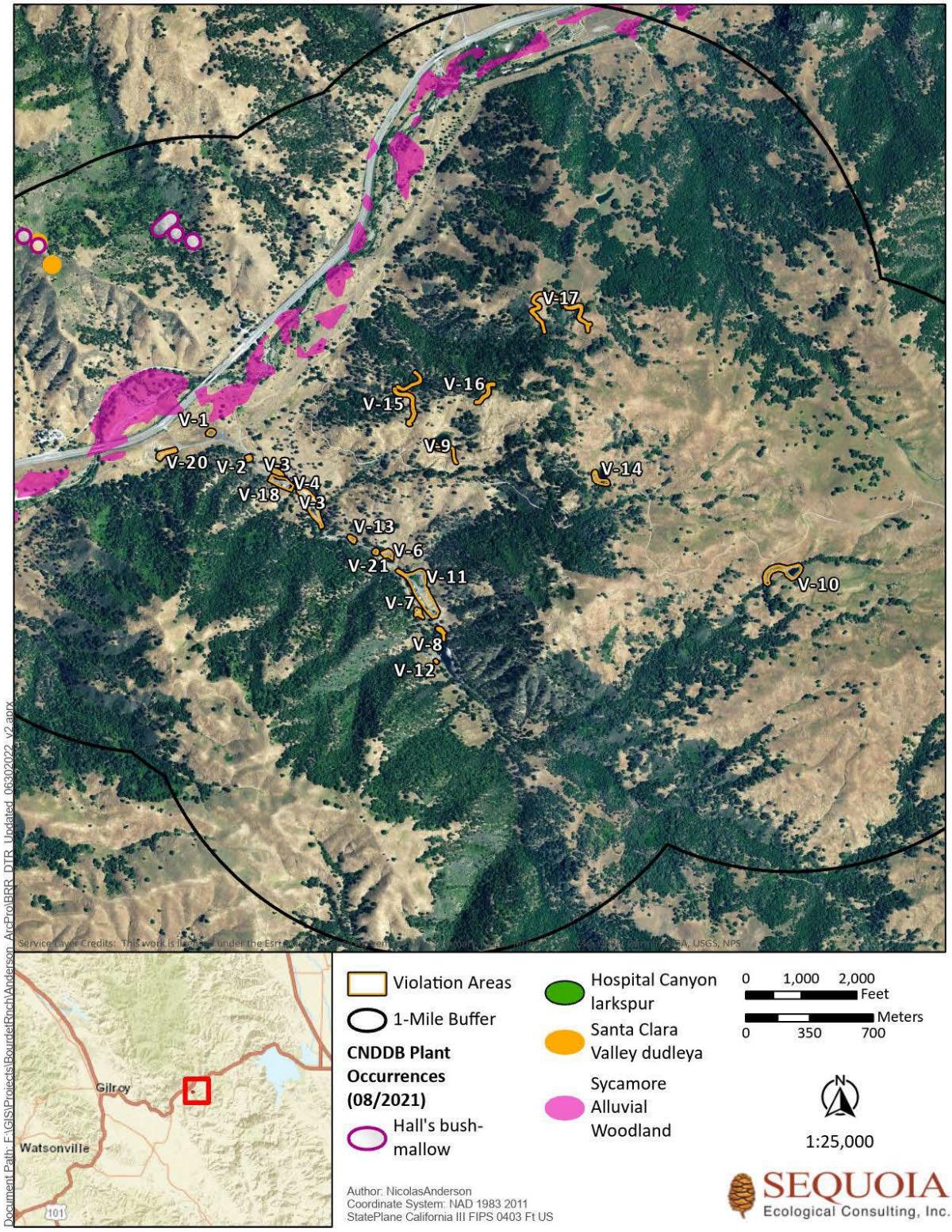


Figure 9. CNDDB Plant Occurrences Within 1 Mile of the Project Site

6.6.1 Hall's Bush-mallow (CNPS 1B.2)

Hall's bush-mallow (*Malacothamnus halli*) is a deciduous perennial shrub in the Malvaceae family. Hall's bush-mallow can be found from 35 to 2,495 feet in elevation in chaparral and coastal scrub habitats within California, although it is only known from a few locations in the Bay Area and western Merced County. Its blooming period is from May through September, but it will occasionally bloom earlier or later (April through October). Hall's bush-mallow has not been observed and is not known to occur on site, though suitable habitat is present on site. CNDDB records show six occurrences within 5 miles of the site in nearby Henry Coe State Park, and along State Route 152, northwest and east of the project area. There is suitable chaparral habitat on site, but since there are no occurrences of this species on site, and chaparral habitat does not occur in any of the violation areas, the project is not expected to impact this species. Hall's bush-mallow is not covered under the SCVHP, and no surveys are required.

6.6.2 Hospital Canyon Larkspur (CNPS 1B.2)

Hospital Canyon larkspur (*Delphinium californicum* ssp*. interius*) is a perennial herb from the family Ranunculaceae. Hospital Canyon larkspur can be found between 640 and 3,595 feet in elevation in the Diablo Range of California as well as near Monterey and just south of the Pinnacles, in chaparral, cismontane woodland, and coastal scrub habitats. This species blooms from April through June. Hospital Canyon larkspur has not been observed and is not known to occur on site. There is suitable habitat within the project area, and a single CNDDB occurrence of this species was found within the Gilroy Hot Springs 7.5-minute quadrangle approximately 4 miles northwest of the project site. Violation areas are outside of mapped habitat for the species, and because there are no occurrences of this species, the project is not expected to impact it. Hospital Canyon larkspur is not covered under the SCVHP, and no surveys are required.

6.6.3 Santa Clara Valley Dudleya (FE, CNPS 1B.1, SCVHP-Covered Species)

Santa Clara Valley dudleya (*Dudleya abramsii* ssp. *setchellii*) is a small, perennial herb in the Crassulaceae family. It can be found from 195 to 1,755 feet in elevation only in Santa Clara County, and within rocky or serpentine habitat found in cismontane woodlands or valley and foothill grasslands. It is known to bloom from April through October. Santa Clara Valley dudleya has not been observed and is not known to occur on site, though there is suitable habitat present. CNDDB records show three occurrences of this species within 5 miles on the Pacheco Peak 7.5-minute quadrangle northwest of the project site and across Highway 152. Since there are no known occurrences of this species on site, and rocky outcrops are not present within any impact areas, the project is not expected to impact the species. However, suitable habitat for the species has been mapped in the project vicinity, and surveys to determine impacts to Santa Clara Valley dudleya will be required under the SCVHP.

6.7 Special-Status Wildlife

Figures 10 and 11 provide a graphical representation of special-status wildlife species occurrences within five miles and one mile of the project site, respectively. Table 3 provides an assessment of the potential for special-status wildlife species to occur on the project site.

A total of 13 special-status wildlife species have been previously documented (CNDDB or eBird occurrences) within 5 miles of the project site. Figure 12 displays the nearest USFWS Critical Habitat for two amphibian species with potential to occur on site, CRLF and CTS. Sequoia analyzed the potential to occur for these wildlife species as well as species included in NMFS and IPaC resource lists during the desktop review (Table 3). A number of these species require specialized habitat such as continually running water, predator-free breeding habitat, or open flat space. Due to lack of suitable habitat and/or lack of recent occurrences in the project vicinity, six special-status fish and wildlife species are not expected to occur and are therefore not discussed further in this analysis: Delta smelt, tricolored blackbird, least Bell's vireo, foothill yellow-legged frog, steelhead south-central California DPS, and California condor. Foothill yellow-legged frog (*Rana boylii*) are not expected to occur based on results of a reconnaissance survey conducted in 2019 by Sequoia biologists; the observation in the vicinity on CNDDB is an identification error that was verified with CDFW, and all suitable habitat was found to be either dried down or occupied by American bullfrogs. Additionally, the site does not support suitable habitat year-round. Descriptions and potential for occurrence of the remaining 13 special-status wildlife species are provided in more detail below (Figures 10 and 11; Table 3).

Although there was tricolored blackbird and least Bell's vireo modeled habitat in SCVHP geobrowser overlapping the project area, no site suitability for either species was observed during the September 9, 2020, survey visit. Specifically, the modeled portions of the project area mapped as suitable for tricolored blackbird were absent any vegetation that provides suitable breeding habitat; the areas were bare, heavily grazed ground mostly encompassing California annual grassland adjacent to coast live oak woodland and forest habitats. Additionally, the areas in and near the project area modeled as potentially suitable least Bell's vireo habitat were not consistent with the species habitat description as indicated in the SCVHP. The modelled areas were incorrectly mapped as riparian woodland; they were observed to be mixed oak woodland and forest or sycamore alluvial woodland, absent of thick understory shrubs and dense willow stands. The biologists determined that the project area does not provide breeding habitat for those species based on the field assessment.

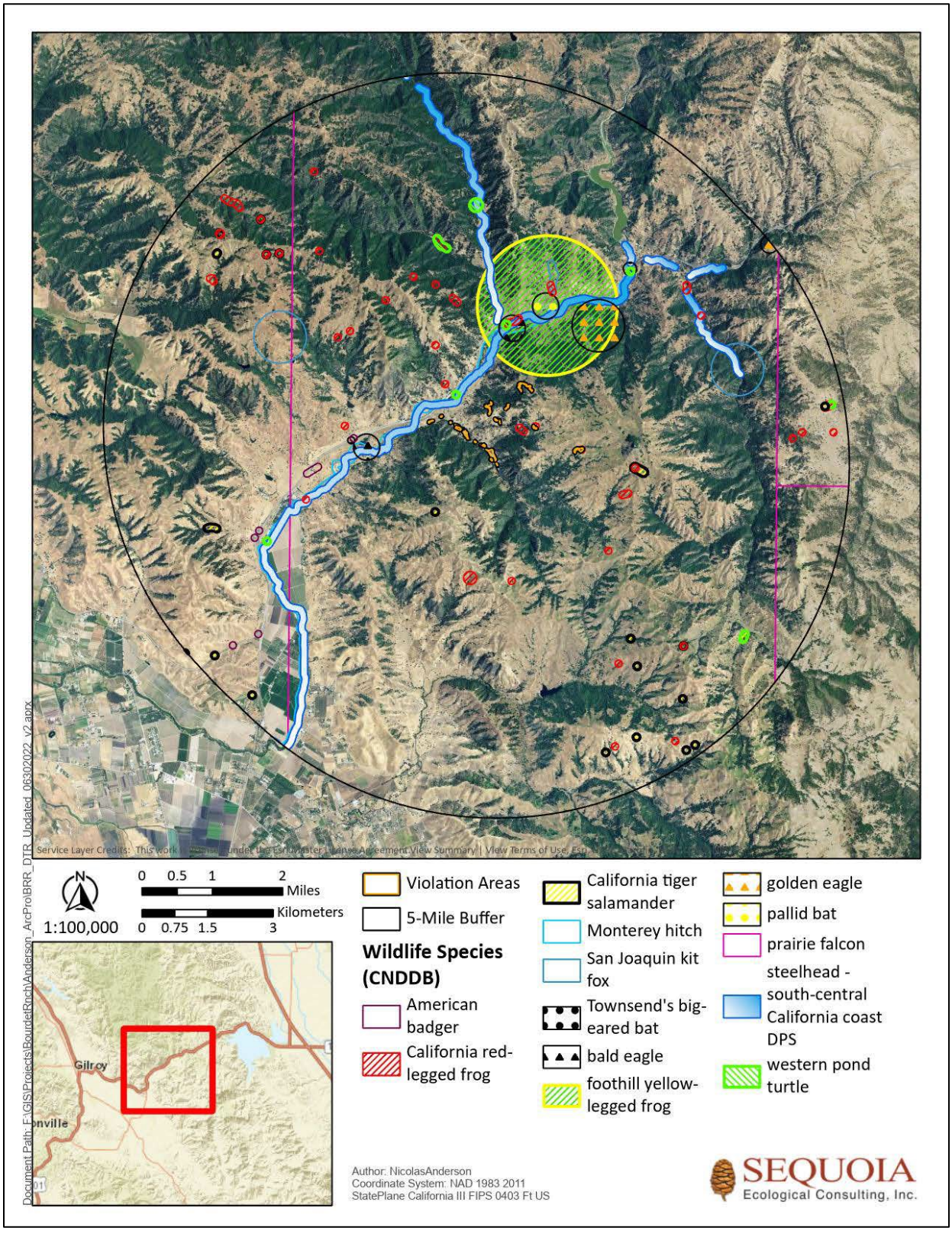


Figure 10. CNDDB Records for Special-Status Animals Near the Project Area

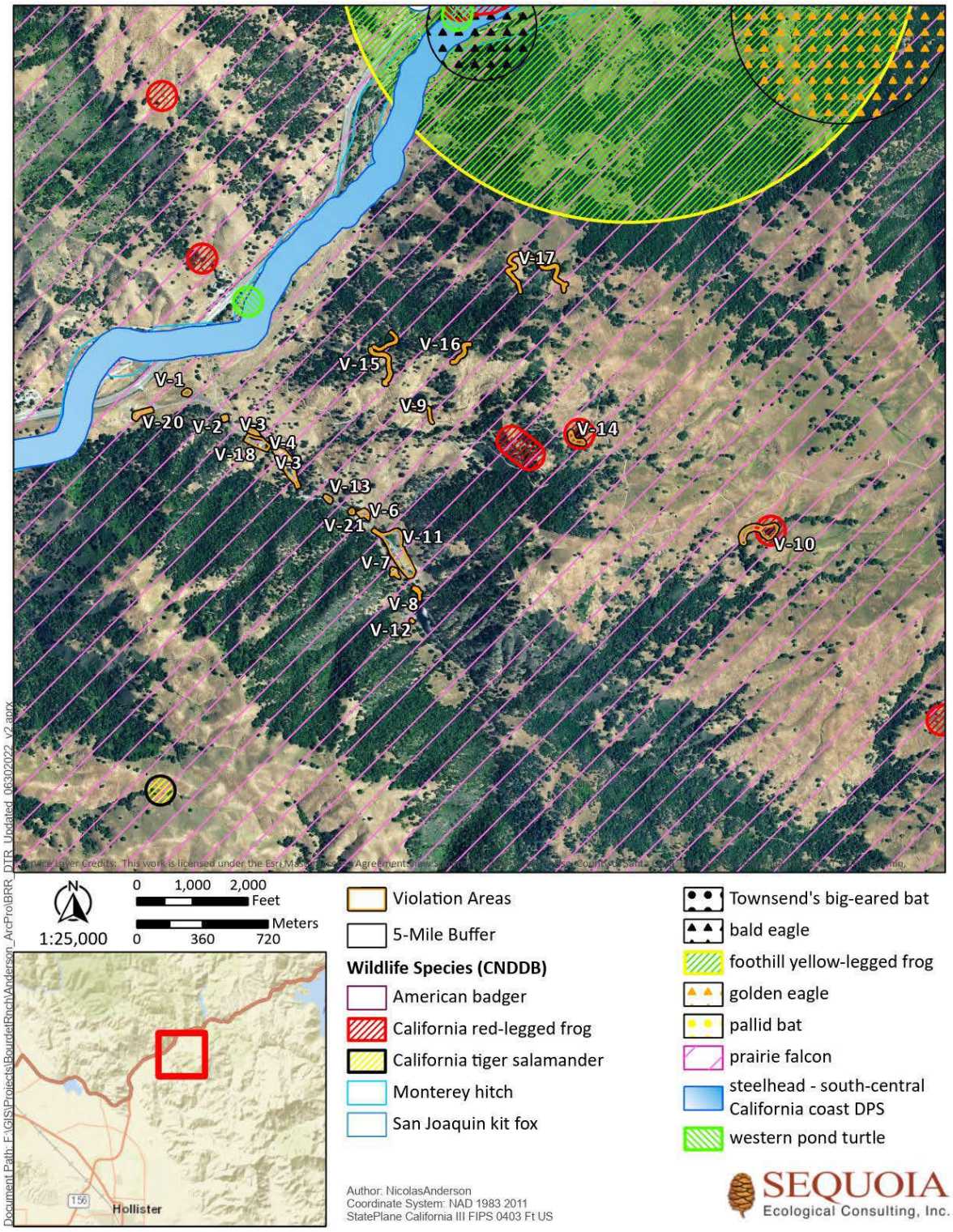


Figure 11. CNDDB Occurrences of Special-Status Animals within 1 Mile of the Project Site

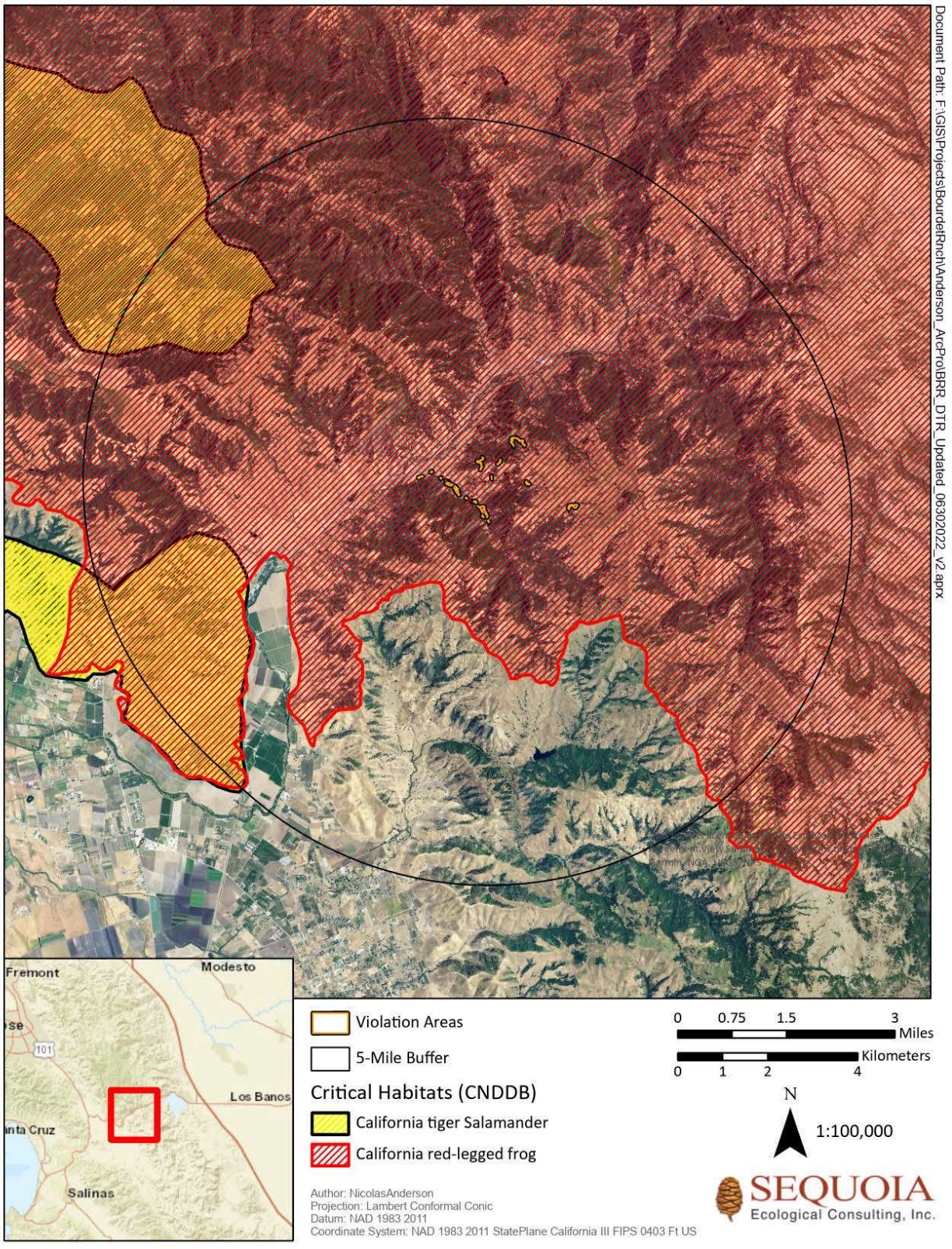


Figure 12. USFWS Critical Habitat in the Vicinity of the Project Area

6.7.1 Pallid Bat (California SSC)

Pallid bats (*Antrozous pallidus*) are locally common throughout low elevations in California, but due to habitat loss their numbers have been declining (Bolster 1998). They are considered a California SSC and a Medium Priority species by the Western Bat Working Group. The pallid bat is a relatively large, light-colored bat ranging throughout western North America, from interior British Columbia to Mexico (Hermanson and O'Shea 1983; Sherwin and Rambaldini 2005). Pallid bats utilize a variety of habitats, including grasslands and mixed forests, low-elevation oak savannah, chaparral, and desert, and prefer open, dry rocky areas (Bolster 1998). Pallid bats typically reside in small groups in a variety of day and night roosts that protect them from high daytime temperatures, including bridges, buildings, tree hollows in coast redwoods, bole cavities in oaks, exfoliating bark, rock crevices in outcrops and cliffs, caves, and mines (Sherwin and Rambaldini 2005). Roost sites may change seasonally and are typically reused for a few days to weeks. They prey on a wide variety of insects and arachnids, including those with large, hard shells such as Jerusalem crickets, thanks to their stout skull and dentition, and frequently take prey off the ground (Zeiner et al. 1990). They are colonial, with colonies typically containing 30 to 70 individuals, but larger colonies containing several hundred individuals have also been observed. Parturition varies with latitude, but generally occurs from late April to August; maternal colonies disperse by October (Hermanson and O'Shea 1983). Overwintering is common along the California coast, but individuals may migrate short distances between winter and summer roosts (Sherwin and Rambaldini 2005).

Within the Project area, there is potential for pallid bats to be present, as the areas contain many old-growth sycamores and valley oaks with cavities that would be suitable as maternity roosts, as well as buildings on site near Harper Canyon Creek. One previous observation of a pallid bat is known from the Pacheco Peak quadrangle, a 1937 observation near Bell Station. Because of their small size, secretive nature, and nocturnal life history, it is difficult to determine whether special-status bat species are present on site. Surveys of possible roosting features and buildings on site will minimize impact to special-status bat species. No removal of large potential roost trees will occur.

6.7.2 Townsend's Big-Eared Bat (California SSC)

Townsend's big-eared bat is regarded as a species at high risk of endangerment throughout its range in western North America. It is designated as a SSC and a Species of Greatest Conservation Need (SGCN) by the CDFW and was recently (2012-2016) the subject of a petition for listing as threatened or endangered under the CESA (Szewczak, Morrison, and Harris 2018). Townsend's big-eared bat is an uncommon resident throughout California, inhabiting mesic environments. The species is a moth specialist and typically roosts in cavities 16 inches in diameter or greater or in caves, mines, bridges, buildings, rock crevices, or tree hollows, and in coastal lowlands, cultivated valleys, and nearby hills characterized by mixed vegetation below 3,300 meters. Townsend's big-eared bats exhibit high site fidelity and are highly sensitive to disturbance. If undisturbed, they will return to maternity sites for many years. They forage by gleaning insects from trees and shrubs along edge habitats near water. Foraging bouts peak in late

evening, and the bats may travel over 20 kilometers during these outings (Fellers and Pierson 2002). Winter hibernacula are used from October to April (Kunz and Martin 1982).

Within the Project area, there is potential for special-status bat species to be present, as the areas contain many old-growth sycamores and valley oaks with cavities that would be suitable as maternity roosts, as well as buildings on site near Harper Canyon Creek. No known observations of Townsend's big-eared bat are known from the area. It is difficult to determine special-status bat species presence on site because of their small size and nocturnal life history. With mitigation in place and surveys to assess areas prior to work on site, minimal impacts to special-status bat species are expected to occur on site. No removal of large potential roost trees will occur.

6.7.3 American Badger (California SSC)

American badgers (*Taxidea taxus*) are an uncommon, permanent resident found throughout much of California within shrub, forest, and herbaceous habitats with friable soils (Zeiner et al. 1990). Badgers are carnivorous predators, preying mainly on fossorial rodents such as ground squirrels, chipmunks, rats, mice, and pocket gophers; other prey, such as birds, reptiles, insects, and carrion are also eaten based on their availability (Zeiner et al. 1990). Badgers dig their own burrows, often daily in summer, to use as cover, and are both diurnal and nocturnal. Badgers mate during the summer and early fall and give birth to 2-3 pups in March and April the following year. The American badger has potential to occur on site within California annual grassland habitats where abundant prey (California ground squirrel) burrows exist, generally in the vicinity of Pacheco Peak. Badgers were not observed on scent-baited camera traps during the 10 months that remote cameras were deployed on site, and badgers, signs of badgers, or their dens have not been observed on site by biologists. CNDDB results within the Pacheco Peak 7.5-minute quadrangle found two recent (June 2019 and 2020) records of roadkill badgers along Highway 152, both north and south of the project area access; this indicates their presence in the general area. Badger habitat is largely absent from the vicinity of the impact areas, and badger dens have not been observed during any site visit, and no impacts to badgers are expected. This species is not covered under the SCVHP. Surveys will be required based on recent sightings in the Pacheco Pass highway corridor and will be conducted prior to abatement activities at the Project site.

6.7.4 San Joaquin Kit Fox (FE, ST, SCVHP-Covered Species)

The SJKF is a state-listed threatened and federally listed endangered species. Critical habitat has not been designated for this species. A recovery plan was published for SJKF on September 30, 1998 (USFWS 1998). The SJKF is the smallest canid species in North America. Currently, there are two recognized subspecies of kit fox: *V. m. mutica* and *V. m. macrotis* (USFWS 1998). Historically, they occurred extensively throughout California's Central Valley and parts of the Salinas and Santa Clara Valleys. They currently inhabit the valley bottom and foothills from southern Kern County north to San Benito, Santa Clara, Alameda, Contra Costa, and San Joaquin Counties to the west as well as those near La Grange, Stanislaus County on the east side of the Central Valley. They can also be found in some of the larger

scattered islands of natural land on the valley floor in Kern, Tulare, Kings, Fresno, Madera, and Merced Counties (USFWS 1998).

SJKF occupy habitats with open or low vegetation and loose soils. In the northern portion of their range, they occupy grazed grasslands and to a lesser extent valley oak woodland (USFWS 1998, USFWS 1999). SJKF are also found in grazed grasslands, including areas adjacent to tilled or fallow fields, and suburban settings (USFWS 1998, USFWS 1999). In the Altamont Pass area, they occupy soils with high clay content (Orloff, Hall, and Spiegel 1986). SJKF uses underground dens to raise pups, to avoid predators, to regulate temperature, and to avoid other adverse environmental conditions. Kit foxes modify and use dens excavated by other animals, as well as man-made structures (culverts). In the northern portion of their range, burrowing mammals (primarily Beechey ground squirrels, *Otospermophilus* spp.) usually provide dens. Natal pupping dens differ from other kit fox dens in that they tend to be larger, have more entrances, are found on flatter ground (slopes of 6 percent) and show evidence of use (O'Farrell and McCue 1981). Dens are usually located on loose-textured soils on slopes less than 40 degrees (O'Farrell et al. 1980). SJKF are predominantly nocturnal; hunting and most other activities are restricted to after dark (Egoscue 1956). In their northern range, they prey predominantly upon Beechey ground squirrels, but they also regularly prey upon kangaroo rat (*Dipodomys* spp.), black-tailed jackrabbit (*Lepus californicus*), desert cottontail (*Sylvalagus audubonii*), ground squirrel (*Otospermophilus* spp.), deer mice (*Peromyscus* spp.), burrowing owl, western meadowlark (*Sturnella neglecta*), and a variety of lizards and insects (Egoscue 1956). Coyote, red fox, bobcats, and raptors have been known to prey on kit fox (Cypher et al. 2000).

SJKF are considered extirpated from much of the project area, despite historical observations along the southeastern edge of the site. The property contains annual grassland and scrub habitat; a camera trapping study targeting SJKF was conducted on site from 2018 to 2019 with scent and bait stations but did not yield any positive SJKF results. The SCVHP has modelled habitat in the vicinity of Pacheco Peak, including portions on the property, but the impact area does not contain suitable habitat (abundance of small mammal burrows, loose soils) or prey, and vicinity to the site's ranching operations likely preclude SJKF from establishing dens in the area. CNDDB search results yielded four (4) SJKF observations within 5 miles of the site, and two within the Pacheco Peak 7.5-minute quadrangle. The more recent of these observations was an individual observed in 2006 at Henry Coe State Park, about 5 miles from the project site (CNDDB 2021). SJKF modelled habitat does occur on site, and the project will be required to comply with Condition 18 of the SCVHP. This is a focal species of the SCVHP.

6.7.5 California Tiger Salamander (FT, ST, SCVHP-Covered Species)

The Central California DPS of the CTS was federally listed as a threatened species on August 4, 2004 (69 FR 47212) and was listed as a threatened species by the State of California effective August 19, 2010 (Section 670.5, Title 14, CCR, as amended). Critical habitat for the Central Valley, Sonoma, and Santa Barbara populations were designated for this species on August 23, 2005, August 31, 2011, and November 24, 2004, respectively. Recovery plans for the Central Valley, Sonoma, and Santa Barbara

populations were published for this species on June 6, 2017, May 31, 2016, and December 12, 2016, respectively (USFWS 2017).

The CTS is a large terrestrial salamander distributed throughout the Central Valley and Central Coast Ranges from Colusa County south to San Luis Obispo and Kern Counties, from sea level to 3,500 feet in elevation. Two disjunct populations are located within Sonoma County and Santa Barbara County, which are geographically isolated from the Central Valley population. Shaffer et al. (2004) identified six distinct populations based on mitochondrial DNA and allozymes analysis: the Santa Rosa area of Sonoma County; the Bay Area (central and southern Alameda, Santa Clara, western Stanislaus, western Merced, and the majority of San Benito Counties); the Central Valley (Yolo, Sacramento, Solano, eastern Contra Costa, northeast Alameda, San Joaquin, Stanislaus, Merced, and northwestern Madera Counties); southern San Joaquin Valley (portions of Madera, central Fresno, and northern Tulare and Kings Counties); the Central Coast Range (southern Santa Cruz, Monterey, northern San Luis Obispo, and portions of western San Benito, Fresno, and Kern Counties); and Santa Barbara County.

CTS inhabit lowland grasslands, oak savannah, and mixed woodland habitats, and require vernal pools, seasonal ponds, or semi-permanent calm waters that pond for a minimum of 3 to 4 months in duration for breeding and larval maturation, and adjacent upland refugia and foraging habitat with small mammal burrows (Storer 1925; Barry and Shaffer 1994; Stebbins 2003). Migration to breeding sites begins with the onset of autumn rains, typically in November. CTS have been reported to travel distances up to 1.6 km (1.0 mile) (Austin and Shaffer 1992), but Trenham and Shaffer (2005) estimate that optimal upland habitat is within 630 m (2,067 feet) of breeding ponds.

Eggs are laid singly or in small clusters on the pond bottom or attached to individual strands of vegetation (Storer 1925; Twitty 1941; Barry and Shaffer 1994; Jennings and Hayes 1994). Metamorphosis requires a minimum of 10 weeks following hatching and young migrate en masse when temporary pools begin to dry in late spring or early summer (Anderson 1968; Feaver 1971; Jennings and Hayes 1994; Stebbins 2003). Outside of the breeding season, juveniles and adults remain in subterranean habitat, typically in small mammal burrows provided by California ground squirrels and pocket gophers (Shaffer, Fisher, and Stanley 1993; Barry and Shaffer 1994; Jennings and Hayes 1994; Stebbins 2003).

CTS is the most vulnerable of the group of amphibians that breed in vernal pools because its long developmental interval to metamorphosis restricts it to pools that are the longest lasting, and therefore often the largest in size. Loss and degradation of complexes of vernal pools pose a significant threat, as many of these areas are essential breeding habitat. CTS are at risk due to loss of habitat from development of agriculture and grazing lands, habitat fragmentation, loss and degradation of complexes of vernal pools, and introduction of predatory exotic species such as mosquitofish (*Gambusia affinis*), American bullfrogs, and Louisiana red swamp crayfish (*Procambarus clarkii*), and poisoning of ground squirrels (Zeiner et al. 1988a; Shaffer, Fisher, and Stanley 1993; Jennings and Hayes 1994). High mortality of CTS while crossing roads travelling to and from breeding sites also adversely affects both individuals and at-risk populations (Barry and Shaffer 1994).

CTS were found on the Bourdet property in 2019 in a stock pond 0.8 miles southeast of the pond at V-10 depicted in Figure 1 (violation area). A total of 21 CNDDB records of CTS occurrences within the USGS 7.5-minute quadrangles for Gilroy Hot Springs (5), San Felipe (5), Three Sisters (9), Pacheco Pass (1), and Pacheco Peak (1) were reported prior to Sequoia's 2018 and 2019 pond sampling efforts, with the closest location more than 2 miles east of the project area. The nearest USFWS critical habitat for this species is Unit EB-12, over 3 miles west of the project site. CTS could potentially use V-10 as it occurs within potential dispersal range and habitat, but CTS were not observed here during pond sampling efforts, and the pond is heavily populated with American bullfrogs, an invasive predator of CTS. Potentially, this species could also aestivate in the vicinity of the pond because suitable upland habitat occurs here. CTS is a SCVHP-covered species.

6.7.6 California Red-Legged Frog (FT, California SSC, SCVHP-Covered Species)

CRLF is federally threatened and a California SSC. Multiple anthropogenic factors have contributed to the decline of CRLF, including introduction of non-native predators and competitors, habitat loss, habitat fragmentation, and habitat degradation, and the species has been extirpated from approximately 70 percent of its historic range (USFWS 2002). CRLF habitat includes lowlands and foothills in or near permanent or semi-permanent water sources, such as lakes, stock ponds, and slow-moving streams with deep pools and dense shrubs or emergent aquatic vegetation (Stebbins 2003). Where water sources are not permanent, CRLF require access to dry-season upland habitat in the form of mammal burrows (USFWS 2002). Breeding peaks in March, when egg masses are attached to vegetation, roots, and twigs in shallower, warmer water with high amounts of cover (Reis 1999). Post-metamorphic CRLF may remain near breeding ponds or disperse into upland or non-breeding aquatic habitats up to 1.74 miles away (Rathbun and Schneider 2001).

CRLF are known to occur within the project area at several locations, including at the pond creation violation slated for restoration at V-10. Additionally, the CNDDB shows 57 occurrences of CRLF within 5 miles of the property. A total of 17 of these occurrences are within the Pacheco Peak 7.5-minute quadrangle. The nearest occurrence of CRLF is on site at V-10, where they have been documented breeding, and at V-14, where an adult was observed in February 2019. Critical Habitat for the species occurs throughout the project site (Unit STC-2; Figure 11). Harper Canyon Creek and its associated tributaries may potentially provide foraging and movement habitat for the species, while the California annual grassland habitat provides dispersal, movement, and aestivation habitat, given the ready availability of mammal burrows. Harper Canyon Creek likely does not provide suitable habitat for CRLF, as bullfrogs are present in large numbers throughout the drainage and breed in the reservoir upstream and may preclude presence of CRLF. Stock ponds on site that dry out annually provide the best habitat and are known from the immediate ranch vicinity. Project actions that may potentially impact CRLF include draining the pond containing developing larvae, or using equipment that directly impacts adult CRLF, if present. The impoundment at Harper Canyon Creek currently allows seepage to the nearby habitat, which would potentially support CRLF, absent bullfrogs. This is a covered species for the SCVHP, and measures to protect impacts to CRLF will be taken prior to and during implementation.

6.7.7 Western Pond Turtle (California SSC, SCVHP-Covered Species)

The WPT is a California Species of Special Concern. It is the only freshwater turtle native to greater California, and is distributed along much of the western coast, from the Puget Sound in Washington south to the Baja Peninsula in Mexico (Storer 1930). This species is a habitat generalist and has been observed in slow-moving rivers and streams (e.g., oxbows), lakes, reservoirs, permanent and ephemeral wetlands, stock ponds, and sewage treatment plants. It prefers aquatic habitat with refugia such as undercut banks and submerged vegetation, and requires emergent basking sites such as mud banks, rocks, logs, and root wads to thermoregulate its body temperature (Holland 1994; Bash 1999). WPT are omnivorous and feed on a variety of aquatic and terrestrial invertebrates, fish, amphibians, and aquatic plants.

WPT regularly utilize upland terrestrial habitats, most often during the summer and winter, especially for oviposition (females), overwintering, seasonal terrestrial habitat use, and overland dispersal (Reese 1996; Holland 1994). Females have been reported to range as far as 1,640 feet from a watercourse to find suitable nesting habitat (Reese and Welsh 1997). Nest sites are most often situated on south- or west-facing slopes, are sparsely vegetated with short grasses or forbs, and are scraped in sands or hard-packed, dry, silt or clay soils (Holland 1994; Rathbun, Seipel, and Holland 1992; Holte 1998; Reese and Welsh 1997). WPT exhibit high site fidelity, returning in sequential years to the same terrestrial site to nest or overwinter (Reese 1996).

Females typically lay their clutch between June and July. In the early morning or late afternoon, gravid females leave the water and move upland to nest (Holland 1994). Natural incubation times vary, ranging from 80 to 100+ days in California. Hatchlings may emerge in the fall or overwinter at the nest, emerging the following spring (Holland 1994). Within 5 miles of the project site, 14 CNDDB records yielded positive results; 6 of these records were from the Pacheco Peak 7.5-minute quadrangle, with five of these records occurring throughout Pacheco Creek along Highway 152. The property's permanent water source (reservoir upstream of Harper Canyon Creek) provides suitable breeding, basking, and foraging habitat for this species, and it is most likely to be observed at this location. WPT may be impacted if present in the stock pond slated for restoration, but WPT have yet to be observed at any on-site stock ponds or in any flowing waters on site. This is a covered species for the SCVHP.

6.7.8 Western Burrowing Owl (California SSC, SCVHP-Covered Species)

The BUOW is designated a California Species of Special Concern by the CDFW and is federally designated as a Bird of Conservation Concern (CDFW 2019). This species receives additional protection under the MBTA and CFGC §3503. BUOW range throughout the Central and San Joaquin Valley, the inner and outer coastal regions, portions of the San Francisco Bay Area, the southern California coast from southern California to the Mexican Border, the Imperial Valley, and in portions of the desert and high desert habitats in southeastern and northeastern California. BUOW require habitat with three basic attributes: open, well-drained terrain; short, sparse vegetation; and underground burrows or burrow facsimiles. Throughout their range, BUOW occupy grasslands, deserts, sagebrush scrub, agricultural areas (including pastures and untilled margins of cropland), earthen levees and berms, coastal uplands,

urban vacant lots, and the margins of airports, golf courses, and roads (Haug, Millsap, and Martell 1993). BUOW rely on burrows excavated by fossorial mammals or reptiles, including prairie dogs, ground squirrels, badgers, skunks, armadillos, woodchucks, foxes, coyotes, and gopher tortoises (Karalus and Eckert 1987). Where the number and availability of natural burrows is limited (e.g., where burrows have been destroyed or ground squirrels eradicated), owls will occupy drainage culverts, cavities under piles of rubble, discarded pipe, and other tunnel-like structures (Haug, Millsap, and Martell 1993).

Like other owls, BUOW breed once each year in an extended reproductive period, during which most adults mate monogamously. Both sexes reach sexual maturity at 1 year of age. Clutch sizes vary, and the number of eggs laid is proportionate to prey abundance. The breeding season occurs from February 1 to August 31, but peaks between late April and July in most years. BUOW have been found occupying burrows in the foothills of California (up to 2,048 feet in elevation) during the non-breeding, winter season (Trulio and Chromczak 2007). These overwintering birds do not remain during the breeding season, and typically do not breed in adjacent or nearby areas (Trulio and Chromczak 2007).

BUOW are not known from CNDDB or eBird records in the vicinity of the property, but at least three individuals have been observed on the Bourdet property during site visits in 2018 and 2019. Two burrowing owls have been observed on motion-activated cameras, and one was observed in the open area near Pacheco Peak; however, all of these observations occurred during the wintering season (November through February), and no evidence of BUOW breeding has been documented on site. Several site reconnaissance surveys for BUOW were conducted in 2018 and 2019 to verify suitable habitat and presence of individuals; suitable wintering habitat is found in the vicinity below Pacheco Peak in California annual grassland, where California ground squirrel activity is high. BUOW were observed there in February 2019, but no habitat is present near the violation areas, and no impact or disturbance to this species is anticipated. BUOW have not been detected on the property during breeding season.

Condition 15 of the SCVHP states that surveys are required when project activities occur within modeled occupied breeding habitat. No modeled breeding habitat is found within the project area. Per guidance from Santa Clara County, surveys will be required because the species has been documented on site despite the area not being mapped as suitable habitat. Mitigation Measure BIO-2f covers impacts to western burrowing owl. This is a SCVHP-covered species.

6.7.9 Golden Eagle (Federally Protected, California SSC, California FP)

Golden eagles (GOEA; *Aquila chrysaetos*) are large predatory birds that inhabit much of the northern hemisphere. They primarily breed on cliffs but will also nest in trees and may build multiple alternate nest sites within their territory that they move between in different years (Driscoll 2010). In temperate areas, pairs of eagles may remain in their breeding territory throughout the year; generally, pairs are faithful to their territories and reuse the site annually (Driscoll 2010). GOEA feed on a variety of prey, with mammals comprising 80-90% of their diet (e.g., hares, rabbits, squirrels, and prairie dogs). GOEA can be found in a variety of habitats, including forests, canyons, shrublands, grasslands, and oak woodlands.

GOEA have been observed on site and may potentially nest on site. Two (2) CNDDB records show that they have historically bred at the location known as "Lover's Leap," 1.5 miles north of the nearest violation area. There are over 20 eBird records for GOEA within 5 miles of the project site (most of which are on Highway 152), but this is likely due to their large size and ability to be observed from vehicles. Issuance of a CWA Section 404 permit for activities within USACE jurisdiction requires compliance with the MBTA, as well as the Bald and Golden Eagle Protection Act (BAGEPA), both of which protect GOEA at the federal level. Accordingly, any restoration activities within USACE jurisdiction will require evaluation for compliance with these two laws with respect to GOEA. No breeding habitat is present within 0.75 miles of any violation area, and as such, no disturbance to the species is anticipated. This species is not covered under the SCVHP and no HCP-specific surveys are required; however, the HCP does require compliance with the BAGEPA.

6.7.10 Bald Eagle (Federally Protected, Delisted)

Bald eagles (*Haliaeetus leucocephalus*) are a large, predatory avian species distributed throughout North America, and are known for building large stick nests in the upper canopies of the tallest trees in an area. Bald eagles may reuse the same nest annually and increase its size over time or reuse alternate nests in their territory. Bald eagles are long-lived, and pairs may stay together for life, or until one of the members dies; the mate may find a new mate shortly thereafter. Bald eagles breed near lakes, reservoirs, rivers, and some rangelands and coastal wetlands, where their primary prey includes fish. Their breeding season lasts from January through July or August throughout most of California. They lay 1-3 eggs, incubate for 35 days, and fledge young at 11-12 weeks of age. Many migratory bald eagles from nesting areas in the northern United States and Canada are known to spend winters in California from fall-early winter until they leave for breeding season in February through April.

Bald eagles are known to occur along Pacheco Creek along Highway 152 and have been observed on site in the lower reaches of the property. No historical or current nests are known to occur on site or within 0.5 mile of the site, and CNDDB records indicate that Pacheco Creek potentially supports a breeding pair. Additionally, over 40 eBird occurrences are found online for bald eagle along Pacheco Creek on Highway 152 within 3 miles of the project site (eBird 2021). Harper Canyon Creek and on-site stock ponds do not support sufficient prey for bald eagles (i.e., large fish), so no disturbance to nesting or foraging bald eagles is expected to occur. This species is not covered under the SCVHP, and no surveys are required.

6.7.11 Loggerhead Shrike (California SSC)

Loggerhead shrikes (*Lanius ludovicianus*) are a California SSC, inhabiting much of the open land in California, except for forested coastal slopes, the coast ranges, and forested areas of the Sierra Nevada, Klamath, southern Cascades, and Siskiyou ranges (Shuford and Gardali 2008). They inhabit open terrain, such as grasslands, pastureland, deserts, and shrublands with grass cover and areas of bare ground, and prominent lookout perches, such as fences, posts, or trees. They also require "impaling sites" for prey manipulation or storage, which can include sharp, thorny, or multi-stemmed plants and barbed wire fences. Their diet consists of seasonally available food items, including arthropods (e.g., grasshoppers,

crickets, beetles, and caterpillars); reptiles, amphibians, small rodents, and birds (Shuford and Gardali 2008). Shrikes nest fairly low to the ground (1-2 meters) in dense shrubs or trees and will routinely renest if their nests fail. Several occurrences of loggerhead shrike are known from eBird (eBird 2021) along Pacheco Pass Highway, and this species has been observed within the greater Bourdet Ranch property during site visits for wildlife surveys in previous years. Suitable habitat is present on site throughout the property, especially in the open grassland areas. Impacts to shrikes are not anticipated due to project activities, as long as appropriate pre-construction surveys and mitigation measures are implemented, and active nests are avoided.

6.7.12 Prairie Falcon (California SSC)

Prairie falcons (*Falco mexicanus*) are a medium-sized falcon that are found throughout much of California. Prairie falcons can be found utilizing a variety of habitats, including the deserts of the southwest, throughout the Central Valley, and along the inner Coast Ranges and Sierra Nevada; they are notably absent in the high-elevation Sierra Nevada or north coast fog belt (Zeiner et al. 1988b). Prairie falcons in California typically spend most of their time on their breeding territory, but birds from more northern latitudes may winter in California (Steenhof 2020). This species uses sheltered cliff faces and rocky ledges overlooking a large, open area for nesting. Their nests are usually a scrape, but they have been observed using old eagle or raven nests on cliffs, bluffs, or rocky outcrops (Zeiner et al. 1988b). Prairie falcons breed from February through September, peaking from April to August. They produce an average clutch size of five eggs; fledglings disperse from the nest starting in June-July, around 38 days after hatching (Steenhof 2020).

Prairie falcons forage in open terrain and often utilize rocky cliffs, outcrops, or other prominent perches, such as power poles. They are diurnal and spend much of their time perched near their eyrie (nest site) or foraging (Zeiner et al. 1988b). Their primary foraging technique is to “sit and wait;” however, they may also forage by low-leveled powered flight, during which they fly over large areas and are able to stoop quickly on startled prey (Steenhof 2020), which consists mostly of all species of ground squirrels and birds (e.g., horned lark, western meadowlark, shorebirds, and mourning doves). They tend to favor squirrels during the breeding season and birds during winter when squirrels are not as readily available (Steenhof 2020).

A total of nine CNDDB occurrences of prairie falcons occur within 5 miles of the property, all from over 35 years ago. There are two eBird occurrences of prairie falcons just off Highway 152, about 1 mile from the project site. There are no known historic nests on site, and no breeding habitat occurs within 0.75 mile of the project area; therefore, no disturbance to the species is anticipated. This species is not covered under the SCVHP, and no HCP-specific surveys are required.

6.7.13 White-Tailed Kite (California SSC)

The white-tailed kite (*Elanus leucurus*) is designated as fully protected by §3511 of the CFGC. This species receives additional protection under the MBTA. White-tailed kites are a small to medium-sized white raptor that are known for their foraging technique of hovering (“kiting”) above potential prey items, then descending vertically onto prey with their wings held high and legs extended.

White-tailed kites inhabit open grasslands and savannahs. They breed in a variety of habitats, including grasslands, cultivated fields, oak woodlands, and suburban areas where prey is abundant. Kites use substantial groves of dense, broad-leaved deciduous trees for both nesting and roosting. Nests are typically built within trees near a water source and may occur in suburban areas with adjacent open areas with abundant prey. Their nest structures are typically placed near the top of dense oak, willow, or other tree stands, 6-20 meters above ground near open foraging areas (Zeiner et al. 1988b). Breeding occurs between February and July and may be double brooded in some years (Baicich and Harrison 2005). During the non-breeding season, white-tailed kites may hang out communally at roost sites (Dunk 1995).

This species occurs throughout California west of the Sierra Nevada and is more commonly seen in the Central Valley and among the foothills (Dunk 1995). White-tailed kites prey on small mammals, reptiles (lizards), insects, and occasionally, birds; their primary prey consists primarily of voles and other small diurnal mammals, and occasionally birds, insects, reptiles, and amphibians (Zeiner et al. 1988b; Dunk 1995). Suitable foraging habitat is present in the project site, and limited nesting habitat is available in trees in the vicinity. Several eBird sightings of white-tailed kites are near the property. The area in general provides habitat for white-tailed kites, and they are likely to occur in the area. This species is not covered under the SCVHP, and no HCP-specific surveys are required. Impacts to white-tailed kites are not expected with mitigation measures in place.

7.0 DISCUSSION AND IMPACT ASSESSMENT

7.1 Significance Criteria

Pursuant to CEQA and CEQA Guidelines, direct and indirect adverse impacts to biological resources are classified as less than significant, potentially significant, or significant. According to CEQA Guideline § 21068, a significant effect on the environment means a substantial, or potentially substantial, adverse change in the environment. According to CEQA Guideline § 15382, a significant effect on the environment is further defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. State, federal, and local jurisdictions and regulations are considered in the evaluation of significance of proposed actions. An examination of the project under CEQA guidelines is provided in Table 5.

Table 5. CEQA Checklist.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				

Table 5. CEQA Checklist.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or US Fish and Wildlife Service?	☐	☐	☒	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or US Fish and Wildlife Service?	☐	☒	☐	☐
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

7.2 Impacts Analysis

a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the US Fish and Wildlife Service?

7.2.1 Impact BIO-1. Special-Status Plants

No special-status plant species are expected to occur on the project site due to marginally suitable habitat or the lack of specialized habitats and/or substrates such species require, as well as the location where abatement work will be performed (i.e., existing roadways, creek channel). During various site visits to the project area, no serpentine habitat was observed, and serpentine-habitat rare plant species are not anticipated to occur. No formal special-status plant surveys have yet occurred in the project

area, but a botanical assessment was conducted in November 2018, which documented that potential habitat is present on site that may support special-status plant species (Sequoia 2018). During the surveys, no special-status plants were detected; however, the timing of the special-status plant surveys did not capture the blooming period of all special-status plants with potential for occurrence. Impacts to special-status plants would be considered a potentially significant impact. Accordingly, pre-construction surveys will be conducted to confirm absence of Hall's bush-mallow, Hospital Canyon larkspur, and Santa Clara Valley dudleya prior to initiation of work activities.

Level of Significance before Mitigation: Potentially Significant.

Mitigation Measures:

BIO-1: Special-Status Plant Species Avoidance

Appropriately timed surveys for Hall's bush-mallow, Hospital Canyon larkspur, and Santa Clara Valley dudleya shall be conducted in compliance with all CDFW (2018), USFWS (1996), and CNPS (2001) published survey guidelines prior to initiation of work activities. Project commencement shall not be initiated until special-status plant pre-construction surveys are completed and subsequent mitigation, if necessary, is implemented. If no special-status plant species are found to inhabit the site, no further mitigation measures would be necessary.

If Hall's bush-mallow, Hospital Canyon larkspur, Santa Clara Valley dudleya, or other special-status plant species are detected, individuals shall be clearly marked and avoided. If special-status plants detected during focused surveys cannot be avoided, consultation with CDFW and/or USFWS (depending on listing status) shall occur. As part of this consultation, a mitigation plan shall be developed and approved by the appropriate agencies to avoid all adverse impacts. The mitigation plan will include methodology of transplanting and/or on-site replanting at a 1:1 (mitigation to impacts) ratio, five-year monitoring program, success criteria (i.e., 70% survivorship threshold), and annual reporting requirements. In addition, this plan shall include worker education and development of appropriate avoidance and minimization measures.

Level of Significance after Mitigation: Less than significant.

7.2.2 Impact BIO-2. Nesting Birds and Special-Status Wildlife – Golden Eagle, Bald Eagle, Western Burrowing Owl, Prairie Falcon, White-Tailed Kite, Loggerhead Shrike, California Red-Legged Frog, California Tiger Salamander, Western Pond Turtle, San Joaquin Kit Fox, American Badger, Townsend's Big-Eared Bat, and Pallid Bat

Based on the database and literature review conducted during the desktop review for the proposed project, 19 special-status wildlife species have been previously documented in the vicinity of the project site (Figures 8a and Figure 8b; Table 3). Due to lack of suitable habitat and/or lack of recent occurrences in the vicinity of the project site, six special-status wildlife species are not expected to occur and are not discussed further: Delta smelt, tricolored blackbird, least Bell's vireo, foothill yellow-legged frog, steelhead south-central California DPS, and California condor. The remaining 13 species are described

below, along with potential constraints associated with each remaining resource with potential to occur on site. Impacting nesting birds and special-status wildlife through project activities would be a potentially significant impact before Mitigation Measures.

Level of Significance before Mitigation: Potentially significant.

Mitigation Measures:

BIO-2a: Environmental Training

Prior to the commencement of project-related activities, a qualified biologist will provide an environmental awareness training program to educate project personnel on relevant special-status species and their habitats, sensitive/regulated habitats, and applicable environmental laws and permits. The training shall include a description of the species and their habitats, importance of preserving species and habitats, penalties for unauthorized take, and the project limits.

BIO-2b: Migratory Birds and Special-Status Raptor Surveys and Nest Avoidance

Tree and vegetation clearing (removal, pruning, trimming, and mowing) shall be scheduled to occur outside the migratory bird nesting season (February 1 through August 31) to protect nesting special-status avian species, including but not limited to prairie falcon, white-tailed kite, loggerhead shrike, bald and golden eagle, burrowing owl, and other nesting birds covered by the MBTA. However, if clearing and/or construction activities will occur during the migratory bird nesting season, then pre-construction surveys to identify active migratory bird and/or raptor nests shall be conducted by a qualified biologist within 14 days of construction initiation on the project site and within 300 feet (i.e., zone of influence) of project-related activities for passerines and nesting raptors and 0.5 mile for bald and golden eagle nests. The zone of influence includes areas outside the project site where birds could be disturbed by construction-related noise or earth-moving vibrations.

If active nest, roost, or burrow sites are identified within the project site, a no-disturbance buffer shall be established for all active nest sites prior to commencement of any proposed project-related activities to avoid construction or access-related disturbances to migratory bird nesting activities. A no-disturbance buffer constitutes a zone in which proposed project-related activities (e.g., vegetation removal, earth moving, and construction) cannot occur. A minimum buffer size of 50 feet for passerines and 300 feet for raptors will be implemented; sizes of the buffers shall be determined by a qualified biologist based on the species, activities proposed near the nest, and topographic and other visual barriers. Buffers shall remain in place until the young have departed the area or fledged and/or the nest is inactive, as determined by the qualified biologist. If work is required within a buffer zone of an active bird nest, work may occur under the supervision of a qualified avian biologist. The qualified avian biologist monitoring the construction work will have the authority to stop work and adjust buffers if any disturbance to nesting activity is observed.

BIO-2c: Bald Eagle and Golden Eagle

In accordance with the BGEPA (USFWS, last amended in 1978), pre-construction surveys for eagles shall be conducted on the project site and within 0.5 miles of project site boundaries. If an active eagle nest is detected within this survey area, the project proponent shall implement a 0.5-mile no-disturbance buffer around the nest until a qualified biologist determines the nest is no longer active.

BIO-2d: Roosting Bats

A qualified biologist shall be hired to conduct surveys for special-status bats (Townsend's big-eared bat and pallid bat) no more than two weeks prior to planned commencement of construction activities that have the potential to disturb bat day roosts or maternity roosts through elevated noise levels or removal of trees. If a visual survey is not sufficient to determine the presence/absence of bats, acoustic equipment (e.g., AnaBat) shall be used to determine potential occupancy and type of species present. If an active maternity roost is detected, a qualified biologist shall determine an appropriate avoidance buffer to be maintained from April 1 until young are flying (typically through August). If an active day roost is detected in a tree or structure planned for removal, or within a zone of influence (i.e., noise, vibration) that could result in roost abandonment, as determined by a qualified biologist, the bats shall be safely evicted under the guidance of a qualified biologist. Day roosts shall not be removed unless the daytime temperature is at least 50°F with no precipitation. Mitigation for day roosts impacted by the project will be achieved through the installation of bat houses on site to replace lost roosts at a 1:1 ratio. Replacement roosts will be placed at the discretion of the qualified biologist.

BIO-2e: Amphibians and Reptiles

A qualified biologist shall conduct pre-construction surveys for amphibians and reptiles within two days of initiating project-related activities adjacent to aquatic habitat. A qualified biologist shall survey the specific work areas within or adjacent to aquatic features, the perimeter around those aquatic features, and densely vegetated riparian portions of the project site within a 500-foot buffer.

A qualified biologist shall be present during all initial ground disturbance, excavation, and grading to monitor for western pond turtle, California red-legged frog, and California tiger salamander. The monitor shall have the authority to halt construction if any western pond turtles or their eggs, California red-legged frog, or California tiger salamander adults, eggs, or larvae are observed within the work area.

Adult western pond turtles shall be allowed to leave the work area on their own accord. If western pond turtle nests are found during the pre-construction survey by a qualified biologist, moth balls (naphthalene) shall be placed around the vicinity of the nest (no closer than 10 feet) to mask human scent and discourage predators. The nest site shall be fenced with orange construction fencing in a 50-foot radius to avoid impacts to the eggs or hatchlings. Construction shall not occur at the nest site or within the 50-foot avoidance area until the young leave the nest. If no nests are found, no further consideration for western pond turtle nests is warranted.

If California red-legged frogs or California tiger salamanders are found in the work area, the individuals shall be allowed to leave the area of their own volition or will be relocated by an

appropriately USFWS/CDFW-permitted biologist, as required. Prior to resumption of project activities, suitable amphibian exclusion fencing shall be installed along the outside edge of project work limits to ensure that individuals are precluded from entering active work areas. The fencing shall be monitored for routine maintenance and should be permanent enough to ensure that it remains in good condition throughout the duration of the construction period on the project site.

- To prevent inadvertent entrapment of reptile and amphibian species, all steep-walled excavations or trenches shall be covered or provided with a wildlife escape ramp at the end of each working day. Before these holes or trenches are filled, they shall be thoroughly inspected for entrapped wildlife by a qualified biologist.
- To prevent inadvertent entrapment of reptile and amphibian species, no monofilament plastic shall be allowed on the project site.

Bio 2f: Western Burrowing Owl

A qualified biologist shall conduct preconstruction surveys for western burrowing owl around the project footprint and within 250 feet of the project site within 7 days of work activities commencing. Surveys will be timed according to the "Staff Report on Burrowing Owl Mitigation" (California Department of Fish and Game 2012). Surveys will focus on areas supporting populations of California ground squirrels and suitable burrows within the project footprint will be flagged for avoidance.

If western burrowing owls are found during preconstruction surveys, the following measures will apply:

- A 250-foot buffer would be maintained between project activities and active burrowing owl nests. The buffer would remain in effect until August 31, until young are fledged and foraging independently, or at the discretion of CDFW.
- If work is occurring outside of nesting season (September 1 to January 31), a 50-foot buffer would be implemented to avoid impacting active burrowing owl burrows

Bio 2g: American Badger

Prior to ground-disturbing activities, a qualified biologist will conduct preconstruction surveys for American badger within the project footprint and a 300-foot buffer for den sites.

- If badger dens are present, a 50-foot buffer will be established around occupied dens.
- If a maternity den is present, the qualified biologist will establish a 200-foot no-disturbance buffer throughout the pup-rearing season (February 15 to July 31).
- Buffers may be modified with regulatory agency approval.

Level of Significance after Mitigation: Less than significant.

7.2.3 Impact BIO-3. Special-Status Fish Species

Based on the database and literature review conducted during the desktop review for the proposed project, no special-status fish species have been previously documented in the project area (Figure 8; Table 3). No direct impacts to special-status fish species are anticipated as a result of the proposed project, however, the following mitigation measures (which will also be implemented for water quality mitigation) will reduce any potential for impacts.

Level of Significance before Mitigation: Less than significant.

Mitigation Measures:

BIO-3a: Special-Status Fish Species Impact Avoidance

The proposed project will be performed between April 15 and November 1 when river flows are low or nonexistent. In the event of substantial flow within Harper Canyon Creek, such that work areas will be flooded on or after April 15, work in these areas will not commence until water levels have receded.

Accordingly, potential impacts to anadromous and non-anadromous fish species will be avoided through performing project-related activities outside of flowing waters and wetted areas.

BIO-3b: Implement Best Management Practices

Sediment migration and discharge from the work site into Pacheco Creek or its tributaries shall be mitigated by implementation of BMPs. Standard BMPs include, but are not limited to, the placement of silt fence or straw wattles between active work areas or materials stockpiles and active waterways and covering all materials stockpiles with visqueen or similar materials during windy conditions (winds greater than 15 mph) or when a greater than 50% chance of rainfall is predicted within a 72-hour period.

Level of Significance after Mitigation: No impact.

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?

c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

7.2.4 Impact BIO-4. Riparian Habitat and Waters of the United States/State

The project will be restoring sycamore alluvial woodland and riparian habitat along Harper Canyon Creek. Temporary impacts due to channel construction, bridge and culvert replacement, and access road realignment will occur but will be offset by on-site mitigation plantings. Impacts to sycamore alluvial woodland habitat will be beneficial, as the projects scope is to restore the system to pre-violation conditions,

or close to pre-violation conditions, and will include mitigation plantings. Addition of sycamore benches and floodplains will provide habitat for specials-status species, such as western pond turtle and nesting birds. Efforts to restore sycamore alluvial woodland habitat would also return native habitat function, including reduced sedimentation and increased channel capacity, and provide habitat for steelhead trout or other native fish. A replanting plan will be provided during the regulatory permitting phase of the project as a CEQA mitigation measure to restore lost habitats (i.e., tree removals) and will be designed to meet the mitigation criteria because it will include replacement native trees at the ratios proposed by both Santa Clara County and CDFW, and will restore stream floodplain function over time. Monitoring of these plantings over time will indicate success of the restoration and will occur over a period of 10 years.

The bed, bank, and channel and associated riparian vegetation of Harper Canyon Creek are subject to CDFW jurisdiction under Section 1600 of the CFGC and the Porter-Cologne Act. Harper Canyon Creek is also considered waters of the United States and waters of the state by the USACE and RWQCB, respectively, pursuant to the CWA. Prior to any impacts to these potentially jurisdictional features, verification by USACE will need to occur. In addition, authorization from the CDFW, USACE, and RWQCB will be required prior to project commencement.

Level of Significance before Mitigation: Potentially significant.

Mitigation Measures:

BIO-4a: Obtain CDFW Section 1600 Lake or Streambed Alteration Agreement

As project activities will encroach on the riparian zone of Harper Canyon Creek to complete County- and CDFW-required NOV abatement, the project proponent shall submit a Section 1600 Notification of Lake or Streambed Alteration application to CDFW. The Notification will include a description of impacts, including quantification of impacts to bed, bank, and channel, as well as individual trees, area and linear footage of riparian vegetation, and proposed mitigation for impacts. A component of the LSAA Notification requested by CDFW in the NOV letter includes a Riparian Revegetation and Monitoring Plan (RRMP), to be prepared by a riparian restoration specialist that addresses the restoration of riparian vegetation removed, genetic assessment of sycamores for hybridization, a 10-year monitoring period, success criteria, anticipated invasive species control, and corrective actions to be taken when success criteria are not met. Mitigation requirements for riparian vegetation by CDFW are typically replacement at 3:1 ratio for trees over 4” DBH, and 10:1 for trees over 24” DBH. Following acceptance of trees removed pre-violation by the County and CDFW, the RRMP will identify final mitigation amounts to be approved by CDFW via the LSAA.

BIO-4b: Obtain USACE/RWQCB Section 404/401 Clean Water Act and Porter-Cologne Authorization

The project proponent shall obtain the appropriate CWA Section 404 permit from USACE and Section 401 Water Quality Certification and Porter-Cologne Waste Discharge Requirement approval from the RWQCB prior to the discharge of any dredged or fill material within jurisdictional waters of the United States/State. Following County and agency acceptance of the proposed grading abatement plans, the applicant will quantify impacts to federal and state jurisdictions and develop a

comprehensive Habitat Mitigation and Monitoring Plan to accompany the 404 and 401 applications that will address mitigation requirements to meet CWA requirements of "no net loss" of wetlands and waters. The HMMP may include on-site restoration and enhancement as well as off-site mitigation components. A mitigation ratio of 1:1 or greater is expected.

BIO-4c: Implement a Tree Replacement Plan to restore lost sycamore alluvial woodland habitat

The project proponent would implement a restoration plan at the conclusion of grading abatement to replace trees lost. The plan would replace trees like-to-like and at the following replacement ratios identified in the County Tree Protection Guidelines as below:

For the removal of one small tree (5-18 inches): (3) 15-gallon trees, or (2) 24-inch box trees.

For the removal of one medium tree (18-24 inches): (4) 15-gallon trees or (3) 24-inch box trees.

For the removal of a tree larger than 24 inches (5) 15-gallon trees or (4) 24-inch box trees.

One tree 5-18 inches in diameter was removed, three trees 18-24 inches was removed, and two trees greater than 24 inches were removed. The remaining 32 removed trees were either missing stumps or too decomposed to determine DBH; for these removals, the maximum replacement ratio should be implemented (5–15-gallon trees or 4-24-inch box trees). Approximately 175 15-gallon trees would be needed to satisfy the County's mitigation ratio. The addition of approximately 175 native trees (sycamore and oak) along with a monitoring period of at least ten (10) years to determine adequate survivorship would restore the habitat to a level of less than significant.

Level of Significance after Mitigation: Less than significant.

d. *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

Active construction may temporarily interfere with the movement of native wildlife within this wildlife corridor; however, no permanent structures or barriers to movement along Harper Canyon creek channel will occur as a result of the proposed project. In addition, the proposed project will have no adverse effects to fish movement along this creek, as the creek dries down annually and tends to only flow during heavy rain events or for a short time thereafter. Work will commence in the channel during the naturally dry season.

Level of Significance before Mitigation: Less than significant.

e. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

No, the project will be restoring impacts to the property and will include mitigation plantings. Additionally, no trees will be removed as part of the project and no tree removal permits will be required under the County of Santa Clara Tree Preservation and Removal ordinance.

Level of Significance before Mitigation: No impact.

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Project implementation will be authorized under the SCVHP and will follow implementation guidelines. The project does not conflict with any other HCPs. An updated HCP Screening Form is provided in Appendix G (also addresses County comment 18). Project impacts to HCP land cover types are shown and calculated in Appendix K, and the associated fee calculation worksheets are provided in Appendix L (Note: all areas to be restored are classified as "temporary" impacts per SCVHP Interpretation 2016-001).

Level of Significance before Mitigation: No impact.

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Appendix A

Project Area Plant List

Table A-1. Plant Species Observed on the Bourdet Ranch NOV Project Site

Family	Scientific Name	Common Name	Native (N)/ Exotic (E)	Invasive Status
Adoxaceae	*Sambucus nigra*	Blue elderberry	N	N/A
Agavaceae	*Chlorogalum pomeridianum*	Soap plant	N	N/A
Anacardiaceae	*Toxicodendron diversilobum*	Poison oak	N	N/A
Apiacaceae	*Conium maculatum*	Poison hemlock	E	Moderate
Apiacaceae	*Daucus pusillus*	American wild carrot	N	N/A
Apiacaceae	*Sanicula crassicaulis*	Pacific sanicle	N	N/A
Apiaceae	*Lomatium dasycarpum*	Hog fennel	N	N/A
Apiaceae	*Torilis arvensis*	Field parsley	E	Moderate
Asteraceae	*Achillea millefolium*	Yarrow	N	N/A
Asteraceae	*Achyrachaena mollis*	Blow wives	N	N/A
Asteraceae	*Artemisia californica*	California sagebrush	N	N/A
Asteraceae	*Artemisia douglasiana*	Douglas' mugwort	N	N/A
Asteraceae	*Baccharis pilularis*	Coyote brush	N	N/A
Asteraceae	*Baccharis salicifolia*	Mule fat	N	N/A
Asteraceae	*Carduus pycnocephalus*	Italian thistle	E	Moderate
Asteraceae	*Centaurea melitensis*	Tocalote	E	Moderate
Asteraceae	*Centaurea solstitialis*	Yellow star-thistle	E	High
Asteraceae	*Cirsium vulgare*	Bull thistle	E	Moderate
Asteraceae	*Cotula coronopifolia*	Brass buttons	N	N/A
Asteraceae	*Crepis capillaris*	Creeping hawksbeard	E	N/A
Asteraceae	*Dittrichia graveolens*	Stinkwort	E	Moderate
Asteraceae	*Grindelia* sp.	Gumplant	N	N/A
Asteraceae	*Helenium puberulum*	Sneezeweed	N	N/A
Asteraceae	*Helminthotheca echioides*	Bristly ox-tongue	E	Limited
Asteraceae	*Hemizonia congesta* ssp. *luzulifolia*	Hayfield tarweed	N	N/A
Asteraceae	*Hypochaeris glabra*	Smooth cat's ear	E	Limited
Asteraceae	*Hypochaeris radicata*	Rough cat's-ear	E	Moderate
Asteraceae	*Lactuca serriola*	Prickly lettuce	E	N/A
Asteraceae	*Logfia gallica*	Cotton-rose	E	N/A
Asteraceae	*Madia gracilis*	Slender tarweed	N	N/A
Asteraceae	*Matricaria discoidea*	Pineappleweed	N	N/A
Asteraceae	*Micropus californicus*	Q-tips	N	N/A
Asteraceae	*Pseudognaphalium californicum*	California cudweed	N	N/A
Asteraceae	*Pseudognaphalium luteoalbum*	Jersey cudweed	E	N/A
Asteraceae	*Silybum marianum*	Milk thistle	E	Limited

Table A-1. Plant Species Observed on the Bourdet Ranch NOV Project Site

Family	Scientific Name	Common Name	Native (N)/ Exotic (E)	Invasive Status
Asteraceae	*Sonchus asper* ssp. *asper*	Prickly sow thistle	E	N/A
Asteraceae	*Sonchus oleraceus*	Common sow thistle	E	N/A
Asteraceae	*Xanthium strumarium*	Cocklebur	N	N/A
Boraginaceae	*Nemophila menziesii*	Baby blue eyes	N	N/A
Boraginaceae	*Phacelia* spp.	Phacelia	N	N/A
Boraginaceae	*Plagiobothrys nothofulvus*	Common popcornflower	N	N/A
Boragincaceae	*Amsinckia intermedia*	Common fiddleneck	N	N/A
Brassicaceae	*Brassica nigra*	Black mustard	E	Moderate
Brassicaceae	*Capsella bursa-pastoris*	Shepherd's purse	E	N/A
Brassicaceae	*Hirschfeldia incana*	Summer mustard	E	Moderate
Brassicaceae	*Nasturtium officinale*	Water cress	N	N/A
Brassicaceae	*Thlapsi arvensis*	Field pennycress	E	N/A
Caprifoliaceae	*Lonicera hispidula*	Pink honeysuckle	N	N/A
Caprifoliaceae	*Symphoricarpos albus*	Snowberry	N	N/A
Caryophyllaceae	*Spergularia rubra*	Red sandspurry	E	N/A
Caryophyllaceae	*Stelleria media*	Common chickweed	E	N/A
Chenopodiaceae	*Salsola tragus*	Russian thistle	E	Limited
Convolvulaceae	*Calystegia purpurata* ssp. *purpurata*	Pacific false bindweed	N	N/A
Convolvulaceae	*Calystegia subacaulis*	Hill false bindweed	N	N/A
Convolvulaceae	*Convolvulus arvensis*	Field morningglory	E	N/A
Cyperaceae	*Carex* spp.	Sedge	N	N/A
Cyperaceae	*Cyperus eragrostis*	Tall flatsedge	N	N/A
Dryopteridaceae	*Dryopteris arguta*	Wood fern	N	N/A
Euphorbiaceae	*Croton californicus*	California croton	N	N/A
Euphorbiaceae	*Croton setiger*	Turkey-mullein	N	N/A
Fabaceae	*Acmispon brachycarpum*	Hillside lotus	N	N/A
Fabaceae	*Lathyrus vestitis*	Pacific pea	N	N/A
Fabaceae	*Lupinus bicolor*	Bicolor lupine	N	N/A
Fabaceae	*Lupinus nanus*	Sky lupine	N	N/A
Fabaceae	*Medicago polymorpha*	California bur clover	N	N/A
Fabaceae	*Trifolium ciliolatum*	Foothill clover	N	N/A
Fabaceae	*Trifolium dubium*	Yellow hop clover	E	N/A
Fabaceae	*Trifolium glomeratum*	Clustered clover	E	N/A
Fabaceae	*Trifolium hirtum*	Rose clover	E	Limited

Table A-1. Plant Species Observed on the Bourdet Ranch NOV Project Site

Family	Scientific Name	Common Name	Native (N)/ Exotic (E)	Invasive Status
Fabaceae	*Trifolium* spp.	Clover	E	N/A
Fabaceae	*Vicia sativa*	Common vetch	E	N/A
Fabaceae	*Vicia villosa*	Hairy vetch	E	N/A
Fagaceae	*Quercus agrifolia*	Coast live oak	N	N/A
Fagaceae	*Quercus douglasii*	Blue oak	N	N/A
Fagaceae	*Quercus kelloggii*	California black oak	N	N/A
Fagaceae	*Quercus lobata*	Valley oak	N	N/A
Geraniaceae	*Erodium botrys*	Longstem filaree	E	N/A
Geraniaceae	*Erodium cicutarium*	Redstem filaree	E	Limited
Geraniaceae	*Geranium dissectum*	Cuttleaf geranium	E	Limited
Geraniaceae	*Geranium molle*	Dove's-foot geranium	E	N/A
Grossulariaceae	*Ribes sanguineum* var. *glutinosum*	Red-flowering currant	N	N/A
Iridaceae	*Sisyrhinchium bellum*	Blue eyed grass	N	N/A
Juncaceae	*Juncus balticus*	Baltic rush	N	N/A
Juncaceae	*Juncus effusus*	Soft rush	N	N/A
Juncaceae	*Juncus patens*	Common rush	N	N/A
Juncaceae	*Juncus xiphioides*	Iris-leaved rush	N	N/A
Lamiaceae	*Clinopodium douglasii*	Yerba buena	N	N/A
Lamiaceae	*Lavendula* sp.	Lavender	E	N/A
Lamiaceae	*Marrubium vulgare*	Common horehound	E	Limited
Lamiaceae	*Salvia columbariae*	Chia	N	N/A
Lamiaceae	*Stachys bullata*	Bugle hedgenettle	N	N/A
Lamiaceae	*Stachys* sp.	Hedge nettle	N	N/A
Lamiaceae	*Trichostema lanceolatum*	Vinegar weed	N	N/A
Lauraceae	*Umbellularia californica*	California bay	N	N/A
Liliaceae	*Calochortus venustus*	Butterfly mariposa lily	N	N/A
Lythraceae	*Lythrum hyssopifolia*	Hyssop loosestrife	E	Moderate
Malvaceae	*Malacothamnus* sp.	Bush-mallow	N	N/A
Malvaceae	*Sidalcea malviflora* ssp. *malviflora*	Common checkermallow	N	N/A
Montiaceae	*Claytonia parviflora*	Miner's lettuce	N	N/A
Myrsinaceae	*Lysimachia arvense*	Scarlet pimpernel	E	N/A
Onagraceae	*Clarkia purpurea*	Winecup clarkia	N	N/A
Onagraceae	*Clarkia* sp.	Clarkia	N	N/A
Onagraceae	*Epilobium brachycarpum*	Autumn willowherb	N	N/A
Onagraceae	*Epilobium canum*	California fuchsia	N	N/A

Table A-1. Plant Species Observed on the Bourdet Ranch NOV Project Site

Family	Scientific Name	Common Name	Native (N)/ Exotic (E)	Invasive Status
Onagraceae	*Epilobium ciliatum*	Willow herb	N	N/A
Orobanchaceae	*Castilleja attenuata*	Valley tassels	N	N/A
Orobanchaceae	*Castilleja exigua*	Purple owl's clover	N	N/A
Papaveraceae	*Eschscholzia californica*	California poppy	N	N/A
Phrymaceae	*Diplacus aurantiacus*	Sticky bush monkeyflower	N	N/A
Phrymaceae	*Erythranthe guttata*	Common monkeyflower	N	N/A
Plantaginaceae	*Plantago lanceolata*	Lanceleaf plantain	E	Limited
Plantaginaceae	*Plantago major*	Common plantain	E	N/A
Platanaceae	*Platanus racemosa*	California sycamore	N	N/A
Poaceae	*Aira caryophyllea*	Silver hairgrass	E	N/A
Poaceae	*Avena barbata*	Slender wild oat	E	Moderate
Poaceae	*Avena fatua*	Wild oat	E	Moderate
Poaceae	*Briza minor*	Little quaking grass	E	N/A
Poaceae	*Bromus diandrus*	Ripgut brome	E	Moderate
Poaceae	*Bromus hordeaceus*	Soft chess	E	Limited
Poaceae	*Bromus madritensis*	Red brome	E	High
Poaceae	*Bromus madritensis*	Madrid brome	E	N/A
Poaceae	*Cynodon dactylon*	Bermuda grass	E	Moderate
Poaceae	*Cynosurus echinatus*	Dogtail grass	E	Moderate
Poaceae	*Elymus glaucus*	Blue wildrye	N	N/A
Poaceae	*Festuca perennis*	Italian ryegrass	E	Moderate
Poaceae	*Gastridium phleoides*	Nit grass	E	N/A
Poaceae	*Hordeum marinum* ssp. *leporinum*	Foxtail barley	E	N/A
Poaceae	*Hordeum marinum* ssp. *gussoneanum*	Mediterranean barley	E	Moderate
Poaceae	*Melica imperfecta*	Small-flower melic grass	N	N/A
Poaceae	*Melic* sp.	Melic	N	N/A
Poaceae	*Poa annua*	Annual bluegrass	E	N/A
Poaceae	*Polypogon monspeliensis*	Rabbitsfoot grass	E	Limited
Poaceae	*Stipa pulchra*	Purple needle grass	N	N/A
Polygonaceae	*Eriogonum latifolium*	Coastal buckwheat	N	N/A
Polygonaceae	*Eriogonum* sp.	Buckwheat	N	N/A
Polygonaceae	*Persicaria hydropiperoides*	False waterpepper	N	N/A
Polygonaceae	*Polygonum aviculare*	Common knotweed	E	N/A
Polygonaceae	*Rumex acetocella*	Sheep sorrel	E	Moderate

Table A-1. Plant Species Observed on the Bourdet Ranch NOV Project Site

Family	Scientific Name	Common Name	Native (N)/ Exotic (E)	Invasive Status
Polygonaceae	*Rumex crispus*	Curly dock	E	Limited
Polygonaceae	*Rumex pulchra*	Fiddle dock	N	N/A
Polygonaceae	*Rumex* sp.	Dock	E	N/A
Pteridiaceae	*Adiantum jordanii*	California maidenhair	N	N/A
Pteridiaceae	*Pellaea andromedifolia*	Coffee fern	N	N/A
Pteridiaceae	*Pentagramma triangularis*	Gold back fern	N	N/A
Ranunculaceae	*Ranunculus californica*	California buttercup	N	N/A
Rhamnaceae	*Frangula californica* ssp. *californica*	California coffeeberry	N	N/A
Rhamnaceae	*Rhamnus crocea*	Spiny redberry	N	N/A
Rhamnaceae	*Rhamnus ilicifolia*	Holly-leaf redberry	N	N/A
Rosaceae	*Heteromeles arbutifolia*	Toyon	N	N/A
Rosaceae	*Holodiscus discolor*	Ocean spray	N	N/A
Rosaceae	*Potentilla* sp.	Cinquefoil	N	N/A
Rosaceae	*Prunus cerifera*	Cherry	E	Limited
Rosaceae	*Prunus ilicifolia*	Holly-leafed cherry	N	N/A
Rosaceae	*Rosa californica*	California rose	N	N/A
Rosaceae	*Rubus ursinus*	California blackberry	N	N/A
Rubiaceae	*Galium aparine*	Common cleavers	N	N/A
Salicaceae	*Salix exigua*	Red willow	N	N/A
Salicaceae	*Salix* sp.	Willow	N	N/A
Sapindaceae	*Aesculus californica*	California buckeye	N	N/A
Scrophulariaceae	*Phyla nodiflora*	Common lippia	N	N/A
Solanaceae	*Solanum* sp.	Nightshade	N	N/A
Solanaceae	*Solanum umbelliferum*	Blue witch	N	N/A
Themidaceae	*Brodiaea elegans*	Elegant brodiaea	N	N/A
Themidaceae	*Dipterostemmon capitatum*	Blue dicks	N	N/A
Themidaceae	*Triteleia laxa*	Ithuriel's spear	N	N/A
Typhaceae	*Typha angustifolia*	Narrowleaf cattail	N	N/A
Typhaceae	*Typha latifolia*	Broadleaf cattail	E	N/A
Urticaceae	*Urtica dioica*	Stinging nettle	N	N/A
Verbenaceae	*Phyla nodiflora*	Common lippia	N	N/A
Verbenaceae	*Verbena lasiostachys*	Western vervain	N	N/A
Violaceae	*Viola pedunculata*	California golden violet	N	N/A

Appendix B

Project Area Animal List

Table B-1. Wildlife Species Observed on the Bourdet Ranch NOV Project Site

Scientific Name	Common Name
Mammals	
Canis latrans	Coyote
Cervus canadensis nannodes	Tule elk
Didelphis virginianus	Virginia opossum
Lepus californicus	Black-tailed jackrabbit
Lynx rufous	Bobcat
Mephitis mephitis	Striped skunk
Microtus californicus	California vole
Neotoma fuscipes	Dusky-footed woodrat
Odocoileus hemionus	Mule deer
Otospermophilus beecheyi	California ground squirrel
Puma concolor	Mountain lion
Sciurus griseus	Gray squirrel
Sus scrofa	Feral pig
Sylvilagus bachmani	Brush rabbit
Urocyon cineoargenteus	Gray fox
Reptiles	
Crotalus oreganus	Northern pacific rattlesnake
Elgaria multicarinata	Northern alligator lizard
Pituophis catenifer	Gopher snake
Sceloperous occidentalis	Western fence lizard
Thamnophis atratus	Aquatic garter snake
Thamnophis sirtalis	Common garter snake
Amphibians	
Ambystoma californiense	California tiger salamander
Anaxyrus boreas	California toad
Batrachoseps attenuates	Slender salamander
Lithobates catesbeianus	American bullfrog
Pseudacris sierrae	Sierran treefrog
Rana draytonii	California red-legged frog
Taricha torosa	California newt
Aneides lugubris	Arboreal salamander
Birds	
Aphelocoma californica	California scrub-jay
Accipiter cooperii	Cooper's hawk
Agelaius phoeniceus	Red-winged blackbird
Anas platyrhyncos	Mallard

Table B-1. Wildlife Species Observed on the Bourdet Ranch NOV Project Site

Scientific Name	Common Name
Aquila chrysaetos	Golden eagle
Athene cunicularia	Burrowing owl
Baeolophus inornatus	Oak titmouse
Bubo virginianus	Great-horned owl
Buteo jamaicensis	Red-tailed hawk
Buteo lineatus	Red-shouldered hawk
Callipepla californica	California quail
Calypte ana	Anna's hummingbird
Cathartes aura	Turkey vulture
Catharus guttatus	Hermit thrush
Catharus ustulatus	Swainson's thrush
Certhia americana	Brown creeper
Chamaea fasciata	Wrentit
Charadrius vociferus	Killdeer
Chondestes grammacus	Lark sparrow
Colaptes auratus	Northern flicker
Corvus brachyrhynchos	American crow
Corvus corax	Common raven
Cyanocitta stelleri	Steller's jay
Dryobates nuttallii	Nuttall's woodpecker
Eremophila alpestris	Horned lark
Euphagus cyanocephalus	Brewer's blackbird
Falco sparverius	American kestrel
Haemorhous mexicanus	House finch
Hirundo rustica	Barn swallow
Icterus bullockii	Bullock's oriole
Junco hyemalis	Dark-eyed junco
Lanius ludovicianus	Loggerhead shrike
Leothlypis celata	Orange-crowned warbler
Melanerpes formicivorus	Acorn woodpecker
Meleagris gallopavo	Wild turkey
Melospiza melodia	Song sparrow
Melozone crissalis	California towhee
Mimus polyglottos	Northern mockingbird
Molothrus ater	Brown-headed cowbird
Pica nutallii	Yellow-billed magpie
Picoides pubescens	Downy woodpecker

Table B-1. Wildlife Species Observed on the Bourdet Ranch NOV Project Site

Scientific Name	Common Name
Pipilo maculatus	Spotted towhee
Psaltriparus minimus	Bushtit
Regulus calendula	Ruby-crowned kinglet
Salpinctes obsoletus	Rock wren
Sayornis nigricans	Black phoebe
Sayornis saya	Say's phoebe
Setophaga coronata	Yellow-rumped warbler
Sialia mexicana	Western bluebird
Sitta carolinensis	White-breasted nuthatch
Spinus psaltria	Lesser goldfinch
Streptopelia decaocto	Eurasian collared dove
Sturnella neglecta	Western meadowlark
Sturnus vulgaris	European starling
Tachycineta bicolor	Tree swallow
Thryomanes bewickii	Bewick's wren
Turdus migratorius	American robin
Tyrannus verticalis	Western kingbird
Zenaida macroura	Mourning dove
Zonotrichia atricapilla	Golden-crowned sparrow
Zonotrichia leucophrys	White-crowned sparrow

Appendix C

USFWS Draft Information for Planning and Consultation System Report

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Santa Clara County, California

Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS

San Joaquin Kit Fox Vulpes macrotis mutica — Endangered
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/2873

Amphibians

NAME	STATUS
California Red-legged Frog Rana draytonii Wherever found There is **final** critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander Ambystoma californiense There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Delta Smelt Hypomesus transpacificus Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/321	Threatened

Flowering Plants

NAME	STATUS
Coyote Ceanothus Ceanothus ferrisae Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8440	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
California Red-legged Frog Rana draytonii https://ecos.fws.gov/ecp/species/2891#crithab	Final

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE.

"BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Allen's Hummingbird Selasphorus sasin This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Common Yellowthroat Geothlypis trichas sinuosa This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31
Lawrence's Goldfinch Carduelis lawrencei This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20
Nuttall's Woodpecker Picoides nuttallii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Oak Titmouse Baeolophus inornatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Rufous Hummingbird selasphorus rufus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8002	Breeds elsewhere

Song Sparrow Melospiza melodia — Breeds Feb 20 to Sep 5
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Spotted Towhee Pipilo maculatus clementae — Breeds Apr 15 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/4243

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Yellow-billed Magpie Pica nuttalli — Breeds Apr 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9726

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of

presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

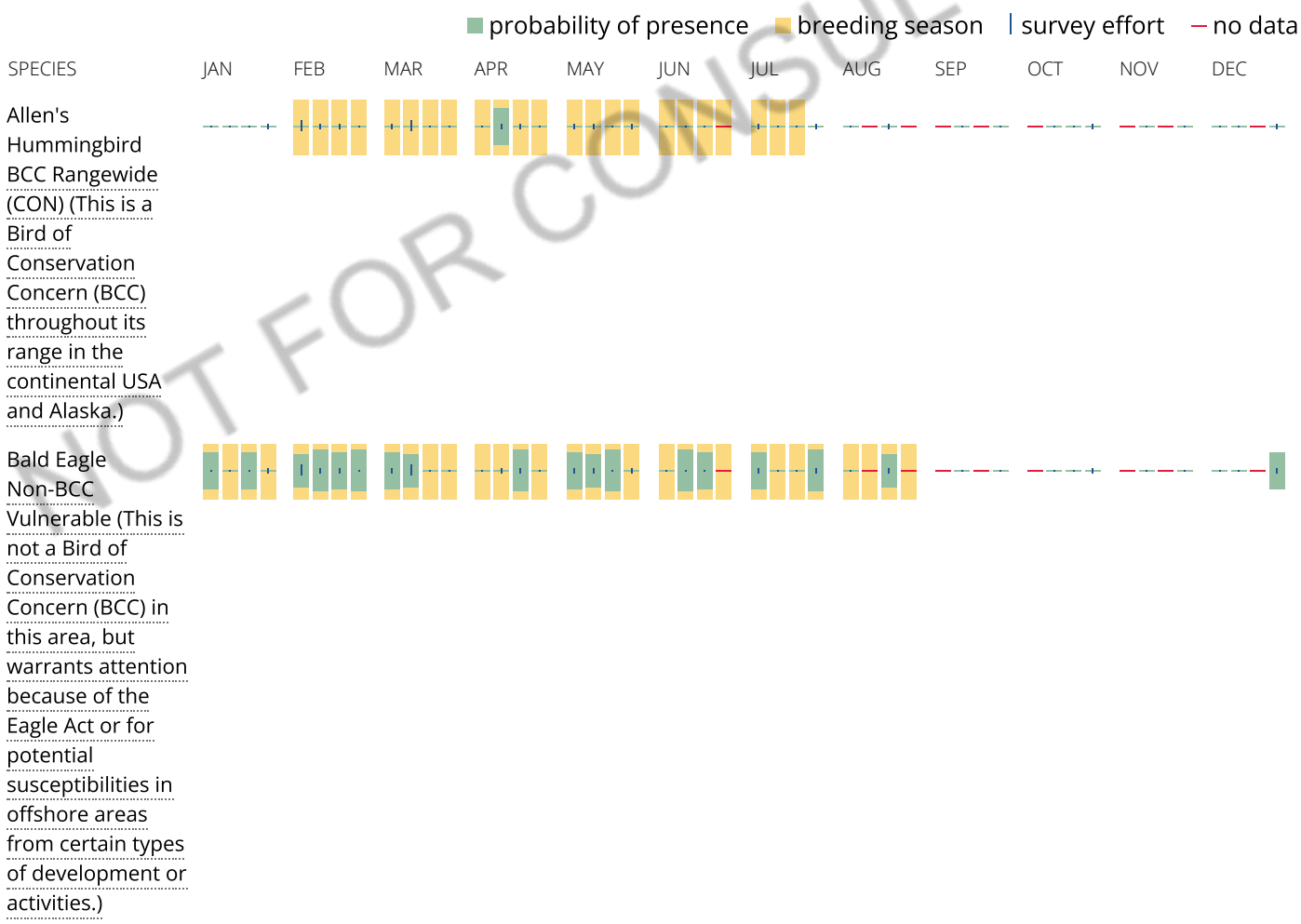
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

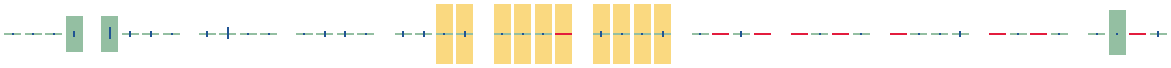
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

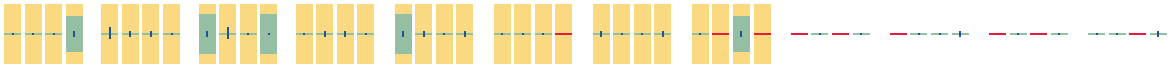
Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



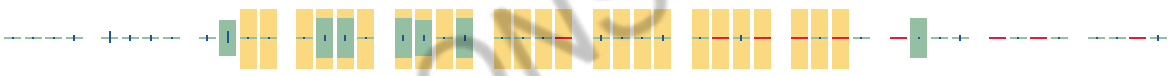
Common Yellowthroat BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Golden Eagle Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Lawrence's Goldfinch BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

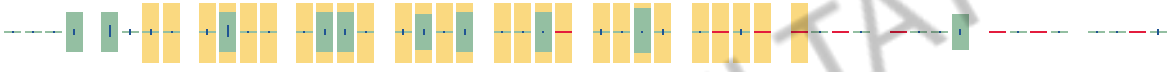


Nuttall's Woodpecker BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

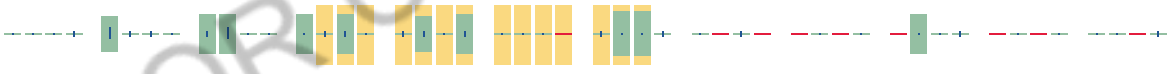
Oak Titmouse BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Rufous Hummingbird BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

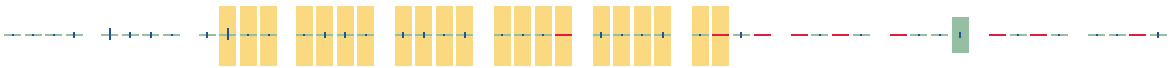
Song Sparrow BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



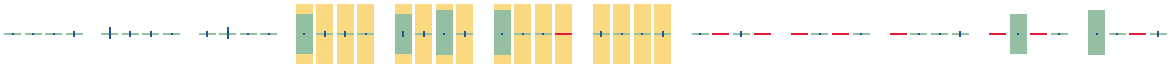
Spotted Towhee BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Tricolored Blackbird BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Yellow-billed Magpie BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

RIVERINE

- R4SBC
- R4SBA

A full description for each wetland code can be found at the National Wetlands Inventory website

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Appendix D

NMFS Online Species List Query Report

From:	Julie Woodruff
To:	nmfswcrca.specieslist@noaa.gov
Cc:	Julie Woodruff
Subject:	Request for Official NMFS Species List - NOAA, Federal Agency Bourdet Ranch Notice of Violation
Date:	Wednesday, August 18, 2021 1:20:06 PM
Attachments:	image001.png image003.png image005.png

Good afternoon,

Results of my NMFS ESA Species List and EFH search are included below. Contact information is in my email signature below.

Thank you,

Quad Name **Pacheco Peak**

Quad Number **37121-A3**

ESA Anadromous Fish

SONCC Coho ESU (T) -

CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -

CVSR Chinook Salmon ESU (T) -

SRWR Chinook Salmon ESU (E) -

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) -

SCCC Steelhead DPS (T) - **X**

SC Steelhead DPS (E) -

CCV Steelhead DPS (T) -

Eulachon (T) -

sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat -

SRWR Chinook Salmon Critical Habitat -

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat -

SCCC Steelhead Critical Habitat - **X**

SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat -

Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -

Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -

Leatherback Sea Turtle (E) -

North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -

Fin Whale (E) -

Humpback Whale (E) -

Southern Resident Killer Whale (E) -

North Pacific Right Whale (E) -

Sei Whale (E) -

Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -

Chinook Salmon EFH -

Groundfish EFH -

Coastal Pelagics EFH -

Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long Beach office

562-980-4000

MMPA Cetaceans -

MMPA Pinnipeds -

EFH Mapper Report

EFH Data Notice

Essential Fish Habitat (EFH) is defined by textual descriptions contained in the fishery management plans developed by the regional fishery management councils. In most cases mapping data can not fully represent the complexity of the habitats that make up EFH. This report should be used for general interest queries only and should not be interpreted as a definitive evaluation of EFH at this location. A location-specific evaluation of EFH for any official purposes must be performed by a regional expert. Please refer to the following links for the appropriate regional resources.

Query Results

Degrees, Minutes, Seconds: Latitude = , Longitude =
Decimal Degrees: Latitude = , Longitude =
The query location intersects with spatial data representing EFH and/or HAPCs for the following species/management units.

EFH

No Essential Fish Habitats (EFH) were identified at the report location.

Salmon EFH

No Pacific Salmon Essential Fish Habitat (EFH) were identified at the report location.

HAPCs

No Habitat Areas of Particular Concern (HAPC) were identified at the report location.

EFH Areas Protected from Fishing

No EFH Areas Protected from Fishing (EFHA) were identified at the report location.

Julie Woodruff Biologist I Project Manager
(she/her/hers)
Sequoia Ecological Consulting, Inc.
1342 Creekside Dr
Walnut Creek CA 94596
jwoodruff@sequoiaeco.com

Cell. 530-953-8162 Main. 925-855-5500

SBE / DBE / WBE Certified

Offices:
Walnut Creek | Sacramento | Monterey | San Diego

www.sequoiaeco.com

WE HAVE MOVED!
Please note that our Danville office has relocated to:
1342 Creekside Drive, Walnut Creek, CA 94596

Appendix E

Tree Inventory

Table E-1. Tree Inventory for Trees with Driplines Within/Extending over Project Areas

Unique ID*	Species Code	Common Name	Species Name	Condition	DBH (in.)	Crown Spread (ft)	Height (ft)	Notes
001	PLOC	Western sycamore	*Platanus racemosa*	Cavity @ base, green	63.5	87	65	1 ft x 6" cavity at base, compartmentalized well, foliage is green throughout
002	QULO	Valley oak	*Quercus lobata*	Green foliage	41	67	60	Overall green foliage, some small dead branches, no cavities
003	AECA	California buckeye	*Aesculus californica*	Sun scorch	15	29	20	Multistem-6xstem, leaves look sun scorched, half leaves green, half brown and dead, 2 large holes at base and exposed roots, est. dbh because behind barbed wire fence
004	SANI	Elderberry	*Sambucus nigra*	Green foliage	27	34	20	Tree appears stressed, lots of epicormic growth from trunk, weak small branches, broken and dead branches throughout, overall green foliage
005	SANI	Elderberry	*Sambucus nigra*	Green foliage	36	28	20	Tree appears stressed, large broken dead branches, multistem, 6+xstem, mucj epicormic growth from trunk, holes at base at roots, green foliage, dbh was estimated because tree was behind barbed wire fence
006	QULO	Valley oak	*Quercus lobata*	Good, green foliage	23.5	45	35	Good condition
007	QULO	Valley oak	*Quercus lobata*	Good, green foliage	35.5	73	50	Good condition, 2 small holes at base, green foliage
008	QULO	Valley oak	*Quercus lobata*	Good, green foliage	40.5	69	50	Good condition, green foliage throughout, woodpecker holes in trunk
009	QULO	Valley oak	*Quercus lobata*	Good, green foliage	48	56	55	
010	PLOC	Western sycamore	*Platanus racemosa*	Ok, some dieback	68	69	50	Huge trunk mass connecting 3 stems, multistem. Leaf scorch and crown dieback with multiple broken and dead limbs, green foliage
011	QULO	Valley oak	*Quercus lobata*	Good, green foliage	38	57	55	

Table E-1. Tree Inventory for Trees with Driplines Within/Extending over Project Areas

Unique ID*	Species Code	Common Name	Species Name	Condition	DBH (in.)	Crown Spread (ft)	Height (ft)	Notes
012	QULO	Valley oak	*Quercus lobata*	Exposed roots	29.5	48	50	Exposed roots that appear broken, green foliage
013	QUAG	Coast live oak	*Quercus agrifolia*	Good, green foliage	19	60	45	Estimated dbh because trunk surrounded by poison oak
014	QUAG	Coast live oak	*Quercus agrifolia*	Exposed roots	15	28	40	Green foliage. Tree is on a slope. Exposed roots. Surrounded by poison oak. DBH estimated
015	QUAG	Coast live oak	*Quercus agrifolia*	Good, green foliage	17	39	45	Estimated dbh because trunk surrounded by poison oak, tree has a lot of epicormic growth but overall green foliage
016	QULO	Valley oak	*Quercus lobata*	Dead branches, green	13	13	25	Some dead branches and exposed roots, overall green foliage
017	QUAG	Coast live oak	*Quercus agrifolia*	Exposed roots, green	16	34	30	Exposed trunk base and roots, cavity at base, green foliage
018	QUAG	Coast live oak	*Quercus agrifolia*	Exposed roots, green	21	52	50	Tree on slope, exposed roots and cavity at base, green foliage, estimated dbh because surrounded by poison oak
019	QULO	Valley oak	*Quercus lobata*	Barbed wire on trunk	32.5	65	65	Barbed wire encircling trunk, granary tree, some dead branches, epicormic growth. Green foliage
020	QULO	Valley oak	*Quercus lobata*	Green foliage	37	55	50	2xstem, one stem dead and hollow, epicormic growth and wasp galls on branches, green foliage
021	PLOC	Western sycamore	*Platanus racemosa*	Dead, no leaves	21	34	50	Completely dead, no leaves
022	PLOC	Western sycamore	*Platanus racemosa*	Dead, no leaves	23	23	25	Completely dead, main trunk broken off, no leaves, pile of dead branches at base
023	QULO	Valley oak	*Quercus lobata*	Good, green foliage	45	62	50	Good, green foliage, granary tree
024	PLOC	Western sycamore	*Platanus racemosa*	Dead, no leaves	19	36	30	Completely dead, no leaves
025	PLOC	Western sycamore	*Platanus racemosa*	Dead, no leaves	15.5	24	40	Completely dead, no leaves

Table E-1. Tree Inventory for Trees with Driplines Within/Extending over Project Areas

Unique ID*	Species Code	Common Name	Species Name	Condition	DBH (in.)	Crown Spread (ft)	Height (ft)	Notes
026	PLOC	Western sycamore	*Platanus racemosa*	Dead, no leaves	13.5	28	40	Completely dead, no leaves
027	PLOC	Western sycamore	*Platanus racemosa*	Dead, no leaves	12	12	35	Completely dead, no leaves
028	PLOC	Western sycamore	*Platanus racemosa*	Dead, no leaves	17	20	30	Completely dead, no leaves
029	QUAG	Coast live oak	*Quercus agrifolia*	Exposed roots, green	26	60	60	On slope, exposed roots, some crown dieback but overall green foliage
030	QULO	Valley oak	*Quercus lobata*	Good, green foliage	33	55	50	Some dead/broken limbs but overall green foliage. Dbh estimated because poison oak at trunk
031	QUAG	Coast live oak	*Quercus agrifolia*	Good, green foliage	25	55	50	Green foliage, on steep slope, exposed roots, covered in poison oak, estimated dbh, 2xstem multistem
032	QULO	Valley oak	*Quercus lobata*	Good, green foliage	18	35	45	On slope, estimated dbh, some dead branches, overall green foliage
033	QULO	Valley oak	*Quercus lobata*	Dead limbs, green	22	71	65	Dbh estimated because of steep slope and poison oak at base. Overall green foliage, granary tree
034	QULO	Valley oak	*Quercus lobata*	Broken limbs, green	23	46	45	Some broken and dead limbs, granary tree, overall green foliage. Dbh estimated due to poison oak at base
035	QUDO	Blue oak	*Quercus douglasii*	Good, green foliage	20	55	35	Green foliage
036	QUDO	Blue oak	*Quercus douglasii*	Good, green foliage	19	64	35	Estimated dbh, tree is on steep slope, some broken limbs but overall green foliage
037	QUDO	Blue oak	*Quercus douglasii*	Good, green foliage	19	62	45	Estimated dbh, tree on steep slope
038	QULO	Valley oak	*Quercus lobata*	Good, green foliage	49.5	58	50	
039	QULO	Valley oak	*Quercus lobata*	Good, green foliage	20.5	39	40	
040	QULO	Valley oak	*Quercus lobata*	Good, green foliage	26	42	40	
041	UMCA	California bay	*Umbellularia californica*	Good, green foliage	14	33	30	Multistem, 3xstem
042	QULO	Valley oak	*Quercus lobata*	Broken exposed roots	40	66	30	On a slope, tree has exposed roots that are broken, green foliage

Table E-1. Tree Inventory for Trees with Driplines Within/Extending over Project Areas

Unique ID*	Species Code	Common Name	Species Name	Condition	DBH (in.)	Crown Spread (ft)	Height (ft)	Notes
043	QULO	Valley oak	*Quercus lobata*	Good, green foliage	34	69	40	
044	QULO	Valley oak	*Quercus lobata*	Growth on trunk	22	26	20	Growth on trunk and at base, green foliage
045	QUAG	Coast live oak	*Quercus agrifolia*	Good, green foliage	48	61	40	
046	QULO	Valley oak	*Quercus lobata*	Good, green foliage	29	43	30	
047	QUAG	Coast live oak	*Quercus agrifolia*	Good, green foliage	39	46	40	Bark cracked and decaying on trunk but overall green foliage
048	QUAG	Coast live oak	*Quercus agrifolia*	Broken stem	22.5	15	30	Broken second stem, green foliage
049	QULO	Valley oak	*Quercus lobata*	Good, green foliage	19.5	32	30	
050	QULO	Valley oak	*Quercus lobata*	Good, green foliage	13	31	30	
051	QULO	Valley oak	*Quercus lobata*	Good, green foliage	12	30	30	
052	QUDO	Blue oak	*Quercus douglasii*	Good, green	17	44	30	
053	QULO	Valley oak	*Quercus lobata*	Good, green foliage	48.5	71	60	Broken large branches, green foliage, beehive in large broken branch
054	QUDO	Blue oak	*Quercus douglasii*	Good, green foliage	21.5	47	30	
055	QUDO	Blue oak	*Quercus douglasii*	Good, green foliage	23	45	60	
056	QULO	Valley oak	*Quercus lobata*	Broken limbs	25	32	25	Large broken limbs and poison oak around trunk, dbh estimated. Green foliage
057	QULO	Valley oak	*Quercus lobata*	Broken limb, green	23	49	40	Large broken limb that splits trunk, green foliage
058	QUAG	Coast live oak	*Quercus agrifolia*	Good, green foliage	14	23	20	
059	UMCA	California bay	*Umbellularia californica*	Good, green foliage	7	21	25	On hill, estimated dbh
060	QULO	Valley oak	*Quercus lobata*	Broken limbs, green	21	24	30	Broken limbs, poison oak at base, dbh estimated
061	UMCA	California bay	*Umbellularia californica*	Good, green foliage	9	15	30	Multistem, 3xstem, green foliage, on hill, dbh estimated
062	QUDO	Blue oak	*Quercus douglasii*	Exposed roots, green	13	38	40	On slope, exposed and broken roots, green foliage, crown sparse looking, dbh estimated

Table E-1. Tree Inventory for Trees with Driplines Within/Extending over Project Areas

Unique ID*	Species Code	Common Name	Species Name	Condition	DBH (in.)	Crown Spread (ft)	Height (ft)	Notes
063	QUAG	Coast live oak	*Quercus agrifolia*	Green overall	14	33	25	Some crown dieback, green overall
064	QUAG	Coast live oak	*Quercus agrifolia*	Good, green foliage	12	31	50	
065	QUAG	Coast live oak	*Quercus agrifolia*	Good, green foliage	16.5	34	45	
066	QUAG	Coast live oak	*Quercus agrifolia*	Trunk has poison oak	8	11	30	Entire length of trunk surrounded by poison oak, green foliage, dbh estimated
067	UMCA	California bay	*Umbellularia californica*	Good, green foliage	3	8	15	Poison oak at base, dbh estimated
068	QUAG	Coast live oak	*Quercus agrifolia*	Good, green foliage	18	19	30	2xstem, multistem
069	AECA	California buckeye	*Aesculus californica*	Dying, brown leaves	29	49	30	Dying, leaves are entirely brown
070	QUAG	Coast live oak	*Quercus agrifolia*	Split trunk	40	51	40	Trunk has large split through it, bark showing decay, poison oak at base, dbh estimated. Green foliage
071	AECA	California buckeye	*Aesculus californica*	Dying, brown leaves	7	11	30	Dying, all leaves are brown
072	QUAG	Coast live oak	*Quercus agrifolia*	Good, green foliage	19.5	47	40	
073	UMCA	California bay	*Umbellularia californica*	Good, green foliage	24	52	50	Multistem, 3xstem
074	UMCA	California bay	*Umbellularia californica*	Good, green foliage	17	25	30	Multistem, 2xstem
075	QULO	Valley oak	*Quercus lobata*	Good, green foliage	19	28	35	
076	QUDO	Blue oak	*Quercus douglasii*	Good, green foliage	17	40	40	Multistem, 2xstem
077	QUDO	Blue oak	*Quercus douglasii*	Good, green foliage	18	46	25	
078	QUDO	Blue oak	*Quercus douglasii*	Good, green foliage	11	18	25	
079	QUAG	Coast live oak	*Quercus agrifolia*	Ok, some dieback	30	23	20	Some crown dieback but overall green foliage, decaying bark
080	QUDO	Blue oak	*Quercus douglasii*	Good, green foliage	13	36	30	
081	QULO	Valley oak	*Quercus lobata*	Good, green foliage	22.5	46	30	
082	QULO	Valley oak	*Quercus lobata*	Good, green foliage	43	54	30	Multistem, 2xstem
083	QULO	Valley oak	*Quercus lobata*	Good, green foliage	39	48	30	Base covered in poison oak, dbh estimated, multistem 2xstem
084	QUDO	Blue oak	*Quercus douglasii*	Good, green foliage	12	14	35	Poison oak at base, dbh estimated
085	QUDO	Blue oak	*Quercus douglasii*	Broken limbs, green	37	37	30	Poison oak at base, estimated dbh, multistem 3xstem with some broken limbs, overall green foliage

Table E-1. Tree Inventory for Trees with Driplines Within/Extending over Project Areas

Unique ID*	Species Code	Common Name	Species Name	Condition	DBH (in.)	Crown Spread (ft)	Height (ft)	Notes
086	QUAG	Coast live oak	*Quercus agrifolia*	Ok, green foliage	24	33	30	Poison oak at base, dbh estimated, epicormic growth on all branches, trunk bark decaying, overall green foliage
087	QUAG	Coast live oak	*Quercus agrifolia*	Large wound, green	42	37	30	Large wound splitting trunk, epicormic growth on branches, surrounded by small bay trees, dbh estimated, green foliage overall
088	QUAG	Coast live oak	*Quercus agrifolia*	Exposed roots, green	16	29	20	On hillside, exposed roots, sparse crown, poison oak at base, dbh estimated, green foliage
089	QUAG	Coast live oak	*Quercus agrifolia*	Good, green foliage	11	25	30	Poison oak at base, dbh estimated
090	QUAG	Coast live oak	*Quercus agrifolia*	Exposed roots	43	53	30	On slope, exposed and broken roots, overall green foliage
091	QUAG	Coast live oak	*Quercus agrifolia*	Split in trunk	48	49	30	Large burl growth on trunk, trunk is split through center, large dead limb, poison oak at base, dbh estimated
092	UMCA	California bay	*Umbellularia californica*	Green foliage	6	12	20	Green, sparse crown, on rocky slope, main trunk broke off
093	UMCA	California bay	*Umbellularia californica*	Green foliage	4	6	15	Green, sparse crown, on rocky slope
094	UMCA	California bay	*Umbellularia californica*	Green foliage	5	10	25	Green, sparse crown, on rocky slope
096	UMCA	California bay	*Umbellularia californica*	Green foliage	5	8	20	Green, sparse crown, on rocky hillside
097	UMCA	California bay	*Umbellularia californica*	Green foliage	4.5	14	15	Green, sparse crown, on rocky hillside
098	UMCA	California bay	*Umbellularia californica*	Green foliage	4	7	20	Green, sparse crown, on rocky hillside
099	QUAG	Coast live oak	*Quercus agrifolia*	Green foliage	24	40	20	
100	QUAG	Coast live oak	*Quercus agrifolia*	Broken limb, green	55	67	40	Large broken limb, overall green foliage
101	QUAG	Coast live oak	*Quercus agrifolia*	Good, green foliage	26.5	79	30	
102	UMCA	California bay	*Umbellularia californica*	Green foliage	12.5	23	25	
103	QUAG	Coast live oak	*Quercus agrifolia*	Good, green foliage	9	10	25	
104	UMCA	California bay	*Umbellularia californica*	Good, green foliage	46	42	30	Multistem
105	QUAG	Coast live oak	*Quercus agrifolia*	Good, green foliage	24	73	40	

Table E-1. Tree Inventory for Trees with Driplines Within/Extending over Project Areas

Unique ID*	Species Code	Common Name	Species Name	Condition	DBH (in.)	Crown Spread (ft)	Height (ft)	Notes
106	QULO	Valley oak	*Quercus lobata*	Good, green foliage	22	41	30	Entire trunk covered in poison oak
107	QUAG	Coast live oak	*Quercus agrifolia*	Green foliage	4.5	8	12	Entire trunk covered in poison oak
108	QUAG	Coast live oak	*Quercus agrifolia*	Good, green foliage	2	7	10	Poison oak at base
109	QUAG	Coast live oak	*Quercus agrifolia*	Good, green foliage	6	12	20	2xstem, poison oak at base
110	UMCA	California bay	*Umbellularia californica*	Good, green foliage	45	36	50	Multistem, dbh estimated, tree is downslope in poison oak
111	QUAG	Coast live oak	*Quercus agrifolia*	Good, green foliage	41	50	40	Dbh estimated, tree is downslope in poison oak
112	UMCA	California bay	*Umbellularia californica*	Good, green foliage	56	66	40	Multistem, dbh estimated
113	QUAG	Coast live oak	*Quercus agrifolia*	Good, green foliage	16.5	52	40	
114	QULO	Valley oak	*Quercus lobata*	Good, green foliage	53.5	83	50	Granary tree
115	QULO	Valley oak	*Quercus lobata*	Good, green foliage	71.5	67	50	Granary tree
116	QULO	Valley oak	*Quercus lobata*	Broken limbs, green	57	78	50	Some large broken limbs, green foliage
117	UMCA	California bay	*Umbellularia californica*	Dead, broken trunk	20	50	45	Completely dead, was a 2xstem, one stem broken on ground, no leaves
118	QULO	Valley oak	*Quercus lobata*	Green foliage	26	55	50	Some crown dieback, and crown is a bit sparse but overall green foliage
119	UMCA	California bay	*Umbellularia californica*	Green foliage	71	66	60	Multistem in riverbed behind barbed wire fence. Estimated dbh
120	UMCA	California bay	*Umbellularia californica*	Green foliage	50	48	60	Multistem, dbh estimated, in riverbed behind barbed wire fence
121	UMCA	California bay	*Umbellularia californica*	Green foliage	18	42	30	Behind barbed wire fence in stream bed, dbh estimated
122	UMCA	California bay	*Umbellularia californica*	Green foliage	30	47	40	Behind barbed wire fence in stream bed, dbh estimated, multistem
123	QUAG	Coast live oak	*Quercus agrifolia*	Broken limbs, green	85	93	60	Some large broken limbs, overall green foliage
124	SALA	Arroyo willow	*Salix lasiolepis*	Green foliage	4	7	20	In group of willows forming dense thicket, poison oak woven throughout

Table E-1. Tree Inventory for Trees with Driplines Within/Extending over Project Areas

Unique ID*	Species Code	Common Name	Species Name	Condition	DBH (in.)	Crown Spread (ft)	Height (ft)	Notes
125	SALA	Arroyo willow	*Salix lasiolepis*	Green foliage	3	10	20	In group of willows forming dense thicket, poison oak woven throughout
126	SALA	Arroyo willow	*Salix lasiolepis*	Green foliage	5	11	20	In group of willows forming dense thicket, poison oak woven throughout, multistem
127	SALA	Arroyo willow	*Salix lasiolepis*	Green foliage	7	12	20	In group of willows forming dense thicket, poison oak woven throughout, multistem
128	SALA	Arroyo willow	*Salix lasiolepis*	Green foliage	4	6	10	In group of willows forming dense thicket, poison oak woven throughout, multistem
129	SALA	Arroyo willow	*Salix lasiolepis*	Green foliage	6	12	10	In group of willows forming dense thicket, poison oak woven throughout
130	SALA	Arroyo willow	*Salix lasiolepis*	Green foliage	5	9	20	In group of willows forming dense thicket, poison oak woven throughout, multistem
131	SALA	Arroyo willow	*Salix lasiolepis*	Green foliage	4	7	10	In group of willows forming dense thicket, poison oak woven throughout, multistem
132	SALA	Arroyo willow	*Salix lasiolepis*	Green foliage	9	10	10	In group of willows forming dense thicket, poison oak woven throughout, multistem
133	SALA	Arroyo willow	*Salix lasiolepis*	Green foliage	18	27	10	In group of willows forming dense thicket, poison oak woven throughout, multistem
134	SALA	Arroyo willow	*Salix lasiolepis*	Green foliage	8	12	10	In group of willows forming dense thicket, poison oak woven throughout, multistem
135	UMCA	California bay	*Umbellularia californica*	Green foliage	16	33	35	
136	QUAG	Coast live oak	*Quercus agrifolia*	Good, green foliage	29.5	41	40	

Table E-1. Tree Inventory for Trees with Driplines Within/Extending over Project Areas

Unique ID*	Species Code	Common Name	Species Name	Condition	DBH (in.)	Crown Spread (ft)	Height (ft)	Notes
137	QUDO	Blue oak	*Quercus douglasii*	Green foliage	5	8	20	
138	QUDO	Blue oak	*Quercus douglasii*	Green foliage	7.5	8	20	
139	QUDO	Blue oak	*Quercus douglasii*	Green foliage	5	7	20	
140	QUDO	Blue oak	*Quercus douglasii*	Green foliage	5	5	20	
141	QUDO	Blue oak	*Quercus douglasii*	Green foliage	11	10	20	2xstem
142	QUDO	Blue oak	*Quercus douglasii*	Green foliage	5	9	20	
143	QUAG	Coast live oak	*Quercus agrifolia*	Green foliage	22.5	42	30	
144	UMCA	California bay	*Umbellularia californica*	Good, green foliage	16.5	23	30	
145	UMCA	California bay	*Umbellularia californica*	Good, green foliage	14	21	30	
146	UMCA	California bay	*Umbellularia californica*	Good, green foliage	14	20	30	
147	UMCA	California bay	*Umbellularia californica*	Good, green foliage	11	4	30	
148	UMCA	California bay	*Umbellularia californica*	Good, green foliage	25	16	30	Multistem
149	QUAG	Coast live oak	*Quercus agrifolia*	Good, green foliage	19.5	44	25	
150	QUAG	Coast live oak	*Quercus agrifolia*	Good, green foliage	14	18	30	Poison oak at base
151	QUAG	Coast live oak	*Quercus agrifolia*	Cavities, green	35	58	30	Two large cavities in trunk, green foliage
152	QULO	Valley oak	*Quercus lobata*	Good, green foliage	35.5	52	50	Granary tree
153	QULO	Valley oak	*Quercus lobata*	Good, green foliage	28.5	54	40	Some broken limbs, green overall, granary tree
154	QULO	Valley oak	*Quercus lobata*	Good, green foliage	14.5	50	30	
155	QULO	Valley oak	*Quercus lobata*	Good, green foliage	29	48	30	Poison oak at base, dbh estimated
156	QULO	Valley oak	*Quercus lobata*	Good, green foliage	61.5	75	50	Granary tree
157	QULO	Valley oak	*Quercus lobata*	Broken stem, green	55	52	30	Main trunk broken, green foliage
158	QUDO	Blue oak	*Quercus douglasii*	Good, green foliage	30.5	64	50	Next to treehouse and goat pen
159	QULO	Valley oak	*Quercus lobata*	Green foliage	42	79	40	Sparse crown, granary tree, green overall
160	QULO	Valley oak	*Quercus lobata*	Good, green foliage	36.5	46	35	Two main broken limbs, overall green
161	QULO	Valley oak	*Quercus lobata*	Good, green foliage	49	43	40	Main trunk broken, green overall
162	QULO	Valley oak	*Quercus lobata*	Green foliage	30	62	40	
163	QULO	Valley oak	*Quercus lobata*	Good, green foliage	35	60	40	Granary tree

Table E-1. Tree Inventory for Trees with Driplines Within/Extending over Project Areas

Unique ID*	Species Code	Common Name	Species Name	Condition	DBH (in.)	Crown Spread (ft)	Height (ft)	Notes
164	QUDO	Blue oak	*Quercus douglasii*	Broken limbs, green	31	67	50	Some broken limbs, overall green foliage, next to little house next to lake
165	QUDO	Blue oak	*Quercus douglasii*	Broken limbs, green	28.5	60	40	Some broken limbs, overall green
166	QULO	Valley oak	*Quercus lobata*	Broken limbs, green	44	58	40	Some broken limbs, covered in poison oak, green foliage
167	QUDO	Blue oak	*Quercus douglasii*	Broken main, green	41	62	40	Main branches from trunk broken leaving large cavity in trunk, poison oak at base, green foliage

*Refer to attached map set for corresponding locations of trees labeled by Unique ID.

Appendix F

Tree Removal Memorandum and Tree Removal Map Book

Date: August 5, 2022

To: Lacy and Wyatt Bourdet
24/7 Livestock
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247livestock@gmail.com
(831) 801-3483

From: Brett Hanshew
Principal-Senior Technical Specialist
Sequoia Ecological Consulting, Inc.

Julie Woodruff
Senior Biologist-Project Manager
Sequoia Ecological Consulting, Inc.

Andrew Ford
Senior Biologist-Certified Consulting Arborist
Sequoia Ecological Consulting, Inc.

RE: **Bourdet Ranch Pre-Violation and Existing Conditions Riparian Assessment**

Memorandum for Pre-Violation and Existing Conditions Riparian Assessment

1.0 Introduction

Dear Mr. and Mrs. Bourdet:

Sequoia Ecological Consulting, Inc. understands that the Bourdet family has been contacted by multiple regulatory agencies, including the County of Santa Clara-Department of Planning and Development, Santa Clara Valley Habitat Agency, California Department of Fish and Wildlife, and the Central Coast Regional Water Quality Control Board regarding alleged violations of State and County ordinances. These violations are varied and range from grading violations, tree removals, creek diversions, and unpermitted development and building.

Based on a review of publicly available Google Earth aerial imagery and communications with Lacy Bourdet, Sequoia understands that many roads and stock ponds on the Bourdet property have been in

use for roughly 40-50 years, at a minimum. However, one stock pond was built in the last 8 (eight) years. Additionally, several structures and a bridge for driveway access were constructed in 2016/2017 along the Harper Canyon Creek drainage, and sections of access roads were created or widened to accommodate access to these structures. The County of Santa Clara Department of Planning and Development, when investigating these potential violations via aerial imagery, identified at least one new stock pond, at least one enlarged stock pond, and resultant erosion from stock pond enlargement. Several of these stock ponds were identified as being created after 1954, the year that the County Grading Ordinance was adopted (*Santa Clara County Grading and Drainage Ordinance 2021*). The County also identified newly created or graded ranch roads and the development of a residential structure and horse arena and boarding facilities, installation of multiple culverts diverting stormwater and runoff into a jurisdictional creek (Harper Canyon Creek), installation of a, unpermitted structure (bridge) over Harper Canyon Creek, and miscellaneous other changes to the landscape identified comprehensively in the attached "PLN20-139 Grading Abatement Application" document dated November 23, 2020.

On top of the mentioned violation areas, Sequoia understands that thirty-nine (39) trees were removed from these violation areas. Removal of trees violates the County Ordinance Code (Code C16-Tree Preservation and Removal). Sequoia arborists performed an existing condition and pre-conditions vegetation assessment to determine the overall effects that the violation areas may have impacted native trees and vegetation.

This memorandum represents a view of the results and findings of the conditions within the violation areas and proposed abatement areas.

2.0 Methods

2.1 Tree Stump Removal Assessment

On April 26 and 27, 2021, ISA Certified Arborist and California Certified Consulting botanist Andrew Ford and ISA Certified Arborist Keala Cummings performed reconnaissance investigations of tree removals and riparian assessment as part of the grading violations ongoing abatement.

Prior to entering the field, remote data was taken via Google Earth to assess a range of when trees within the violation areas were removed. This data was uploaded to maps using GIS technology and was used to locate trees within the violation areas.

Data collection for the reconnaissance investigations began at the entrance of the Bourdet Ranch near Pacheco Pass Highway and headed south toward the impoundment on Harper Canyon Creek. The arborists performed a visual assessment of all proposed violation areas collecting data on all trees that

were removed and marked any new trees that were removed but not documented. The arborist collected data by performing a stump assessment.

Diameter at breast height (DBH) was collected for all trees within the violation areas. Crown spread was documented by measuring from the trunk flare to the longest branch (drip line). Condition of trees were documented through observations of presence of fungi, insects or insect bore holes, structural splits, crown, and root condition/rot. For structural condition, a numerical value was assigned to roots, trunks, branch and foliage and averaged for an overall rating. Remnant stump conditions within the respective violation areas were determine whether the trees were impacted prior to the survey or if it was in declining health prior to removal.

2.2 Canopy and Vegetation Area Assessment

Sequoia conducted passive plant surveys along the abatement areas to determine whether the Project will impact special-status species and plant communities based on definitions provided in Keeler-Wolf and Sawyer (2009). Passive, non-protocol level surveys were conducted during the assessment. A visual assessment using controlled methodology was used to identify the dominant canopy cover and tree species within the violation areas. A comparison of aerial topography was used to assess the change in habitat prior to the surveys and determine the extent of removal. A list of all plants observed during the assessment can be found in Appendix A, Table 1.

3.0 Results

3.1 Tree Stump Removal Assessment

On April 25 and 26, 2021, ISA certified arborists Andrew Ford and Keala Cummings performed data collection for the reconnaissance investigations. The arborists collected all data on paper notes and iPad ArcGIS pro application for an iPad. The results of the findings are summarized in Table 1.

During the assessment of tree removals, the arborists performed an assessment of the habitats within the violation areas, as well as dominant canopy trees in the area. The arborists found that the dominant trees within the violation areas consisted of valley oak (*Quercus lobata*), coast live oak (*Quercus agrifolia*), California black oak (*Quecus kelloggii*), blue oak (*Quercus douglasii*) and California bay laurel (*Umbellularia californica*). There were no noticeable changes to habitat within the violation zones. The habitat area may have been slightly altered but canopy and habitat remained consistent after all removals. Below is a breakdown of the observations and results of the reconnaissance level habitat and canopy assessment.

Canopy Area 1: This area was located just north of the Lower Harper Canyon Creek Impacts. This area consisted non-native annual grassland and oak savannah. The canopy consisted of primarily even-aged valley oak (*Quercus lobata*) in dense clusters.

Canopy Area 2: This area was located directly southwest of the Lower Harper Canyon Creek Impacts. The habitat consisted of oak savannah and foothill grassland. The canopy consisted primarily of coast live oak and valley oak with a subcanopy of California bay laurel and California buckeye (*Aesculus californica*). There were no signs of dead or dying trees in the grove.

Canopy Area 3: This area was located directly on the north portion of the Graded Area of Harper Canyon Creek. The dominant habitat consisted primarily of non-native annual grassland. The grassland did not have a dominant canopy tree, but trees located within the area in general consisted of valley oak.

Canopy Area 4: This area was located just east of the Graded area of Harper Canyon Creek. The dominant habitat onsite consisted of oak savannah. The main canopy cover consisted of even-aged stands of valley oak. There were no signs of disease or sick trees within the area.

Canopy Area 5: This area was located within Grading of the Harper Canyon Creek violation area. The main area is predominantly non-native annual grassland, with a small riparian section along Harper Creek running through the area. There was no cohesive canopy to create cover, but there was one large valley oak that was observed along the bank of the channel.

Canopy Area 6: This area was located near the southern end of the Grading of Harper Canyon Creek violation area. The area is predominantly ruderal along the roadside with a small riparian zone running along Harper Canyon Creek. The predominant canopy is valley oak, but California sycamore (*Platanus racemosa*) was found in small numbers along the creek bank and in the channel.

Canopy Area 7: This area was located at the fork of the road leading to the residence and horse stables. The area was predominantly non-native annual grassland along the western fence of the driveway. The canopy within the area consists of coast live oak and valley live oak. There was no observable change to the habitat types in the area because of tree removals.

Canopy Area 8: This area located adjacent to the house and horse stable violation area was predominantly non-native annual grassland. There was no coherent canopy, but dominant trees found in this area consisted of only valley oak.

Canopy Area 9: This area was located just north of the impoundment on Harper Canyon Creek violation zone. The main habitat consists of mixed oak woodland and riparian. The main canopy consisted of predominantly oak trees along the creek channel and the roadways. The tree species here included valley oak, coast live oak, blue oak, California bay laurel, and California buckeye.

Canopy Area 10: This area was located on the east side of the impoundment of Harper Canyon Creek violation zone. The main habitat consisted of primarily oak savannah, including several species of oak. The dominant canopy trees consisted of valley oak. There was no evidence of change to habitat within the site.

Canopy Area 11: This area was located on the western side of the Impoundment of Harper Canyon Creek violation area. The main habitat consists of mixed oak woodland riparian habitat. The main canopy trees in the area consisted of valley oak, blue oak, and California buckeye.

Canopy Area 12: This area was located near the Middle Cattle Stock Pond Impoundment violation zone. The main habitat onsite consists of non-native annual grassland. There is no coherent canopy around the pond and impoundment but a stretch of mix oak woodland downstream is dominated by valley oak and coast live oak.

Canopy Area 13: This area is a riparian zone located on the East Cattle Stock Pond Impoundment. The habitat in this area was riparian consisting of willows (*Salix* spp.), California bay laurel, blue oak, coast live oak, and valley oak. Non-native annual grassland surrounds the bank of the channel and the impoundment pond. There is significant upland runoff damage north of the original channel due to the damming of the creek and re-channelization. This has not affected the habitat or riparian zone.

The following table shows the results of the assessment of all tree removals in the violation area.

Table 1. Comprehensive list of removed trees from the Project area.

Unique ID	Violation Area	Removal Date	Species Name	DBH_Est. (Taken from Stump)	Pre-Condition	Crown Spread	Notes
1	Creek Crossing Downstream of Impoundment	2014-2/22/2016	Unknown	No stump present. DBH could not be measured	Condition could not be assessed due to no stump	0	No stump. Early removal. Tree was most likely dead due to other dead or dying trees in the area.
2	Creek Crossing Downstream of Impoundment	2014-2/22/2016	Unknown	No stump present. DBH could not be measured	Condition could not be assessed due to no stump	0	No stump. Early removal. Tree was most likely dead due to other dead or dying trees in the area.
3	House, Horse Arena	12/17-12/16	*Quercus lobata*	No stump present. DBH could not be measured	Condition could not be assessed due to no stump	0	No stump. Location of the stable
4	House, Horse Arena	12/17-12/16	*Quercus lobata*	No stump present. DBH could not be measured	Condition could not be assessed due to no stump	0	No stump. Location of the stable
5	Grading in Harper Canyon Creek	11/17/2016-12/5/2017	*Platanus racemosa*	17 inches	Tree was likely dead prior to removal. Signs of illness and dead trees near removal spot.	0	

6	Grading in Harper Canyon Creek	11/17/2016-12/5/2017	*Platanus racemosa*	No stump present. DBH could not be measured	Tree was likely dead prior to removal. Signs of illness and dead trees near removal spot.	0	
7	Grading in Harper Canyon Creek	11/17/2016-12/5/2017	*Platanus racemosa*	No stump present. DBH could not be measured	Tree was likely dead prior to removal. Signs of illness and dead trees near removal spot.	0	Stump is present but not near the area of removal. Many small saplings noted in the area
8	Grading In Harper Canyon Creek	11/17/2016-12/5/2017	*Quercus lobata*	Partially decomposed stump 20 inches	Tree was likely dead prior to removal. Signs of illness and dead trees near removal spot.	0	
9	Grading in Harper Canyon Creek	11/17/2016-12/5/2017	*Quercus lobata*	No stump present. DBH could not be measured		0	Most likely a QULO based in conspecifics in the area.
10	Grading in Harper Canyon Creek	11/17/2016-12/5/2017	Unknown	No stump present. DBH could not be measured	Tree was likely dead prior to removal. Signs of illness and dead trees near removal spot.	0	
11	Lower Harper Canyon Creek (V-20)	3/20/2013-4/12/2015	*Platanus racemosa*	Stump has been removed	No stump was present. Condition could not be determined.	Crown spread could not	

						be assessed.	
12	Lower Harper Canyon Creek (V-20)	3/20/2013-4/12/2015	*Platanus racemosa*	24 inches	Signs of rot typical of insect damage. There were many insect holes which could have been present prior to removal. Tree most likely dead prior to removal	0.	
13	Lower Harper Canyon Creek (V-20)	3/20/2013-4/12/2015	*Platanus racemosa*	42 inches	Stump present. There were signs of burn but unable to determine tree health prior to removal.	0	
14	Lower Harper Canyon Creek (V-20)	2014-2/22/2016	Unknown	Stump has been completely removed	Tree stump was not present when observations were made. The tree was most likely dead prior to removal	Crown spread could not be assessed.	
15	Lower Harper Canyon Creek (V-20)	2014-2/22/2016	Unknown	Stump has been removed	Tree stump was not present when observations were made. The tree was most likely dead prior to removal	Crown spread could not be assessed.	

16	Lower Harper Canyon Creek (V-20)	11/17/2016-12/5/2017	*Quercus agrifolia*	A partial stump measure was taken. 60 inches	Tree was highly decayed. Could not be assessed health of tree prior to removal	Crown spread could not be assessed	
17	Lower Harper Canyon Creek (V-20)	11/17/2016-12/5/17	*Quercus agrifolia*	Stump has been removed	No stump present. Tree was partial and was most likely dead prior to removal.	Crown spread could not be assessed	Stump removed when road culvert was installed
18	Middle Cattle Stock Pond Impoundment	5/21/2012-3/30/2013	*Quercus lobata*	Removed tree present. 19 inches	Tree was still present downslope of the impoundment. Sign of beetle and rot present in remains but likely was present post-removal Tree was most likely alive when removed	0	
19	Middle Cattle Stock Pond Impoundment	5/21/2012-3/30/2013	*Quercus lobata*	No stump present. DBH could not be measured	Condition could not be assessed due to no stump	0	
20	East Cattle Stock Pond Impoundment	2014-4/12/2015	Unknown	No stump present. DBH could not be measured	Condition could not be assessed due to no stump	0	Tree species difficult to determine. Multiple species are present onsite along drainage and no stump is present to determine.

21	East Cattle Stock Pond Impoundment	2014-4/12/2015	Unknown	No stump present. DBH could not be measured	Condition could not be assessed due to no stump	0	Tree species difficult to determine. Multiple species are present onsite along drainage and no stump is present to determine.
22	East Cattle Stock Pond Impoundment	2014-4/12/2015	Unknown	No stump present. DBH could not be measured	Condition could not be assessed due to no stump	0	Tree species difficult to determine. Multiple species are present onsite along drainage and no stump is present to determine.
23	East Cattle Stock Pond Impoundment	2014-4/12/2015	Unknown	No stump present. DBH could not be measured	Condition could not be assessed due to no stump	0	Tree species difficult to determine. Multiple species are present onsite along drainage and no stump is present to determine.
24	East Cattle Stock Pond Impoundment	2014-4/12/2015	Unknown	No stump present. DBH could not be measured	Condition could not be assessed due to no stump	0	Tree species difficult to determine. Multiple species are present onsite along drainage and no stump is present to determine.
25	Bridge Area Construction	3/20/2013-4/12/2015	*Quercus lobata*	No stump present. DBH could not be measured	Condition could not be assessed due to no stump	0	Various equipment and a cattle ramp were placed in the tree location. No tree was present.
26	House, Horse Arena	5/11/2008-5/24/2009	*Quercus lobata*	No stump present. DBH could not be measured	Condition could not be assessed due to no stump	0	No stump was present. Assume QULO due to majority of trees in the area

27	ADU Area	4/12/2015-2/22/2016	*Quercus lobata/Quercus douglasii*	No stump present. DBH could not be measured	Pre-Condition could not be assessed due to no stump. Tree likely alive prior to removal	0	
28	ADU Area	4/12/2015-2/22/2016	*Quercus lobata/Quercus douglasii*	No stump present. DBH could not be measured	Pre-Condition could not be assessed due to no stump. Tree likely alive prior to removal	0	There was a burn pile in the location where it seemed a stump was present. Charcoal was observed around the stump and sign of burn was found on the remains.
29	ADU Area	4/12/2015-2/22/2016	*Quercus lobata*	No stump present. DBH could not be measured	Pre-Condition could not be assessed due to no stump. Tree likely alive prior to removal	0	
30	Double Culvert Crossing	4/12/2015-2/22/2016	Unknown	No stump present. DBH could not be measured	Condition could not be assessed due to no stump	0	The tree has been completely removed for driveway.
31	Impoundment on Harper Canyon Creek	4/12/2015-2/22/2016	Unknown	No stump present. DBH could not be measured	Pre-Condition could not be assessed due to no stump. Tree likely alive prior to removal		Stump likely removed when impoundment was constructed.
32	Impoundment on Harper Canyon Creek	4/12/2015-2/22/2016	*Quercus lobata*	No stump present. DBH	The tree was most likely alive during removal. During the impoundment	0	Stump likely removed when impoundment was constructed.

				could not be measured	construction flooding of the shoreline most likely killed tree		
33	Impoundment on Harper Canyon Creek	4/12/2015-2/22/2016	*Quercus lobata*	No stump present. DBH could not be measured	The tree was most likely alive during removal. During the impoundment construction flooding of the shoreline most likely killed tree	0	Stump likely removed when impoundment was constructed.
34	Impoundment on Harper Canyon Creek	4/12/2015-2/22/2016	Unknown	No stump present. DBH could not be measured	Pre-Condition could not be assessed due to no stump. Tree likely alive prior to removal	0	Stump likely removed when impoundment was constructed.
35	Impoundment on Harper Canyon Creek	4/12/2015-2/22/2016	Unknown	No stump present. DBH could not be measured	Pre-Condition could not be assessed due to no stump. Tree likely alive prior to removal	0	Stump likely removed when impoundment was constructed.
36	Impoundment on Harper Canyon Creek	4/12/2015-2/22/2016	Unknown	No stump present. DBH could not be measured	Pre-Condition could not be assessed due to no stump. Tree likely alive prior to removal	0	Stump likely removed when impoundment was constructed.
37	Impoundment on Harper Canyon Creek	4/12/2015-2/22/2016	Unknown	No stump present. DBH	Pre-Condition could not be assessed due to no stump. Tree	0	Tree down within the Harper Creek drainage. Tall non-native forbs cover the area and the

				could not be measured	likely alive prior to removal		stump location was not determined
38	Impoundment on Harper Canyon Creek	4/12/2015-2/22/2016	Unknown	No stump present. DBH could not be measured	Pre-Condition could not be assessed due to no stump. Tree likely alive prior to removal	0	Tall non-native forbs cover the area, and the stump location was not determined
39	Impoundment on Harper Canyon Creek	Tree was not removed	*Quercus lobata*	18.5 inches	Tree is still present.	15-ft.	Tree was documented as removed but is still present. Tree seems unhealthy and is probably being slowly drowned by anoxic and compacted soils caused by construction and flooding.

4. Discussion

Out of the thirty-nine (39) tree removals, only seven (7) stumps remained that could be identified (Table 1). Out of all the tree species onsite, a majority of removed trees were either valley oak or western sycamore. The status of the trees prior to removal could not be identified in most of the removals, but in the 7 stumps that remained it was determined that five of the trees were still alive and two were dead when removed within the violation zones. One of the trees that was marked as removed was intact (Valley oak; Tree 39) and should be removed from analysis. No new undocumented removals were removed during the survey. It is recommended that no further tree removals, regardless of status, should be removed at this time. When performing the passive plant surveys in the violation zones, no special status plants or communities were observed. The dominant land cover type in the canopy assessment and violation areas consisted of non-native annual grassland, mixed with large stretches of oak savannah. The dominant canopy trees consisted of blue oak, valley oak, coast live oak, California bay laurel, and western sycamore.

Measure to be taken to protect remaining trees onsite

(1) Protected trees and their protected perimeters shall be clearly shown on all grading and site plans. Trees slated for removal, if any, will be clearly marked on plans.
(2) Every tree retained for protection on the approved plans shall be clearly delineated with a substantial barrier (i.e. orange construction fencing) along the protected perimeter or limits established during the permitting process. The delineation shall be in place during all site work. Any trees to be removed will be clearly marked in the field, and a plan will be made to dispose of any brush, earth, or other debris to avoid injury to any protected tree in the vicinity.
(3) If proposed work is to encroach on a protected tree, measures shall be taken to allow the tree's roots to obtain water, oxygen, and nutrients. No changes in existing ground level shall occur within the protected perimeter unless a drainage and aeration scheme is approved and utilized by a certified arborist. No burning or use of equipment with an open flame shall occur near the protected perimeter.
(4) No dumping or storage of oil, gasoline, chemicals, or other substances which may be harmful to trees shall occur within the dripline of any tree, or any other location from which the substances may enter the dripline.
(5) If any damage to a protected tree should occur during or as a result of work on the site, the county and any relevant regulatory agencies shall be notified of damages. If a protected tree is damaged that it cannot be preserved, replacement will be required in accordance with the project's tree replacement ratio, as provided by the County:

For the removal of one small tree (5- 18 inches):
(3) 15-gallon trees, or (2) 24-inch box trees.
For the removal of one medium tree (18 – 24 inches):

(4) 15-gallon trees or (3) 24-inch box trees.
For the removal of a tree larger than 24 inches
(5) 15-gallon trees or (4) 24-inch box trees.

(6) Additional design standards for protected trees are as follows:
   a. Underground trenching for utilities should avoid tree roots within the protected perimeter. If avoidance is impractical, tunnels should be made below major roots. If tunnels are impractical and cutting roots is required, it shall be done by hand-sawn cuts after hand digging trenches. Trenches should be consolidated to serve as many units as possible.
   b. Compaction within the drip line or protected perimeter shall be avoided.
   c. Paving with either concrete or asphalt over the protected perimeter should be avoided. If paving over the protected perimeter cannot be avoided, affected trees shall be treated as removed for purposes of calculating arboreal values.
   d. Wherever possible, septic systems and/or leachlines shall not be located on the uphill side of a protected tree.

If you have any questions or concerns, please do not hesitate to contact me at the email or phone number listed below. Thank you for the opportunity to support you on this project.

Sincerely,

Andrew Ford | ISA Certified Arborist and California Consulting Botanist CCB - 0029
Sequoia Ecological Consulting, Inc.
Mobile: 707.863.1635 | Main: 925.855.5500 | Fax: 510.439.1104
aford@sequoiaeco.com
www.sequoiaeco.com

5.0 References

Grading and Drainage Ordinance, Ordinance No. NS-1203.120, § 1, 4-9-13, https://library.municode.com/ca/santa_clara_county/codes/code_of_ordinances?nodeId=TITCCODELAUS_DIVC12SULADE_CHIIIGRDR_ART1GEPR

Appendix A.
List of plants passively observed during the reconnaissance assessment

Table 1. Plant species passively observed during reconnaissance visit.

Scientific Name	Common Name	Family	Native?
Achillea millefolium	yarrow	Asteraceae	Y
Achyrachaena mollis	blow wives	Asteraceae	Y
Acmispon brachycarpum	hillside lotus	Fabaceae	Y
Aesculus californicus	California buckeye	Sapindaceae	Y
Amsinckia intermedia	common fiddleneck	Boragincaceae	Y
Avena fatua	wild oats	Poaceae	N
Baccharis pilularis	coyote brush	Asteraceae	Y
Baccharis salicifolia	mule fat	Asteraceae	Y
Briza minor	small quakinggrass	Poaceae	N
Brassica nigra	black mustard	Brassicaceae	N
Bromus diandrus	ripgut brome	Poaceae	N
Bromus hordeaceus	soft chess	Poaceae	N
Bromus madritensis	red brome	Poaceae	N
Calochortus venustus	butterfly mariposa lily	Liliaceae	Y
Calystegia purpurea	Pacific false bindweed	Convolvulaceae	Y
Calystegia subacaulis	hill false bindweed	Convolvulaceae	Y
Capsella bursa-pastoris	sheperd's purse	Brassicaceae	N
Castilleja attenuata	valley tassels	Orobanchaceae	Y
Castilleja exigua	purple owl's clover	Orobanchaceae	Y
Carduus pycnocephalus	Italian thistle	Asteraceae	N
Centaurea meletensis	tocalote	Asteraceae	N
Centaurea solstitilalis	yellow star thistle	Asteraceae	N
Chlorogalum pomeridianum var. *pomeridianum*	common soaproot	Agavaceae	Y
Clarkia purpurea	winecup clarkia	Onagraceae	Y
Clarkia sp.	clarkia	Onagraceae	Y
Claytonia parviflora	miner's lettuce	Montiaceae	Y
Conium maculatum	poison hemlock	Apiaceae	N
Convolvulus arvensis	field morningglory	Convolvulaceae	N
Cotula coronopifolia	brass buttons	Asteraceae	N
Crepis capillaris	creeping hawksbeard	Asteraceae	N
Cyperus eragrostis	tall flatsedge	Cyperaceae	Y
Diplacus aurantiacus	sticky bush monkeyflower	Phrymaceae	Y
Dipterostemmon capitatum	blue dicks	Themidaceae	Y

Epilobium sp.	willowherb	Onagraceae	Y
Eriogonum latifolium	coastal buckwheat	Polygonaceae	Y
Erodium botrys	longstem filaree	Geraniaceae	N
Erodium cicutarium	redstem filaree	Geraniaceae	N
Erythranthe guttata	common monkeyflower	Phrymaceae	Y
Eschschozia californica	California poppy	Papaveraceae	Y
Festuca perennis	Italian ryegrass	Poaceae	N
Galium aparine	common cleavers	Rubiaceae	Y
Gastridium phleoides	nit grass	Poaceae	N
Geranium dissectum	cuttleaf geranium	Geraniaceae	N
Geranium molle	Dove's-foot geranium	Geraniaceae	N
Helminthotheca echioides	bristly ox-tongue	Asteraceae	N
Hirschfeldia incana	shortpod mustard	Brassicaceae	N
Hordeum marinum ssp. *leporinum*	foxtail barley	Poaceae	N
Hypochaeris glabra	smooth cat's ear	Asteraceae	N
Hypochaeris radicata	rough cats' ear	Asteraceae	N
Juncus effusus	western rush	Juncaceae	Y
Lactuca serriola	prickly lettuce	Asteraceae	N
Lathyrus vestitis	Pacific pea	Fabaceae	Y
Lavendula sp.	lavender	Lamiaceae	N
Lomatium dasycarpum	hog fennel	Apiaceae	Y
Lupinus bicolor	bicolor lupine	Fabaceae	Y
Lupinus nanus	sky lupine	Fabaceae	Y
Lysimachia arvense	scarlet pimpernel	Myrsinaceae	N
Lythrum hyssopifolia	hyssop loosestrife	Lythraceae	N
Marrubium vulgare	common horehound	Lamiaceae	N
Matricaria discoidea	pineappleweed	Asteraceae	Y
Micropus californicus	q-tips	Asteraceae	Y
Medicago polymorpha	California bur clover	Fabaceae	N
Nemophila menziesii	baby blue eyes	Boraginaceae	Y
Phyla nodiflora	common lippia	Scrophulariaceae	Y
Plagiobothrys nothofulvus	common popcornflower	Boraginaceae	Y
Plantago lanceolata	lanceleaf plantain	Plantaginaceae	N
Poa annua	annual bluegrass	Poaceae	N
Prunus cerifera	cherry	Rosaceae	N
Pseudognaphalium luteoalbum	Jersey cudweed	Asteraceae	N

Quercus agrifolia	coast live oak	Fagaceae	Y
Quercus douglasii	blue oak	Fagaceae	Y
Quercus kelloggii	California black oak	Fagaceae	Y
Quercus lobata	valley oak	Fagaceae	Y
Ranunculus californica	California buttercup	Ranunculaceae	Y
Rumex acetocella	sheep sorrel	Polygonaceae	N
Rumex crispus	curly dock	Polygonaceae	N
Rumex pulchra	fiddle dock	Polygonaceae	N
Salix exigua	red willow	Salicaceae	Y
Sambucus nigra	blue elderberry	Adoxaceae	Y
Sidalcea malviflora ssp. *malviflora*	common checkermallow	Malvaceae	Y
Silybum marianum	milk thistle	Asteraceae	N
Sisyrhinchium bellum	blue eyed grass	Iridaceae	Y
Solanum umbelliferum	blue witch	Solanaceae	Y
Sonchus oleraceus	common sow thistle	Asteraceae	N
Spergularia rubra	red sandspurry	Caryophyllaceae	N
Stachys bullata	bugle hedgenettle	Lamiaceae	Y
Stelleria media	common chickweed	Caryophyllaceae	N
Thlapsi arvensis	field pennycress	Brassicaceae	N
Torilis arvensis	field parsley	Apiaceae	N
Toxicodendron diversilobum	poison oak	Anacardiaceae	Y
Trifolium ciliolatum	foothill clover	Fabaceae	Y
Trifolium dubium	yellow hop clover	Fabaceae	N
Trifolium glomeratum	clustered clover	Fabaceae	N
Trifolium hirtum	rose clover	Fabaceae	N
Triteleia laxa	Ithuriel's spear	Themidaceae	Y
Typha angustifolia	narrowleaf cattail	Typhaceae	Y
Typha latifolia	broadleaf cattail	Typhaceae	N
Umbellularia californica	California bay laurel	Lauraceae	Y
Urtica dioica	stinging nettle	Urticaceae	Y
Vicia villosa	hairy vetch	Fabaceae	N
Viola pedunculata	California golden violet	Violaceae	Y

Appendix B: Photo Log

Photo 1. Location of open grassland where two trees were removed.

Photo 2: Example of tree stumps that were found onsite.

Photo 3. Stump location of Tree 12 showing the partial stump in the creek bank.

Photo 4: Photo showing a portion of the violation area where a tree was removed.

Photo 5: Locations of Tree 1 and 2 along Harper Canyon Creek along the boundary of the riparian zone.

Photo 6: Downed trees that were present at several of the removal areas.

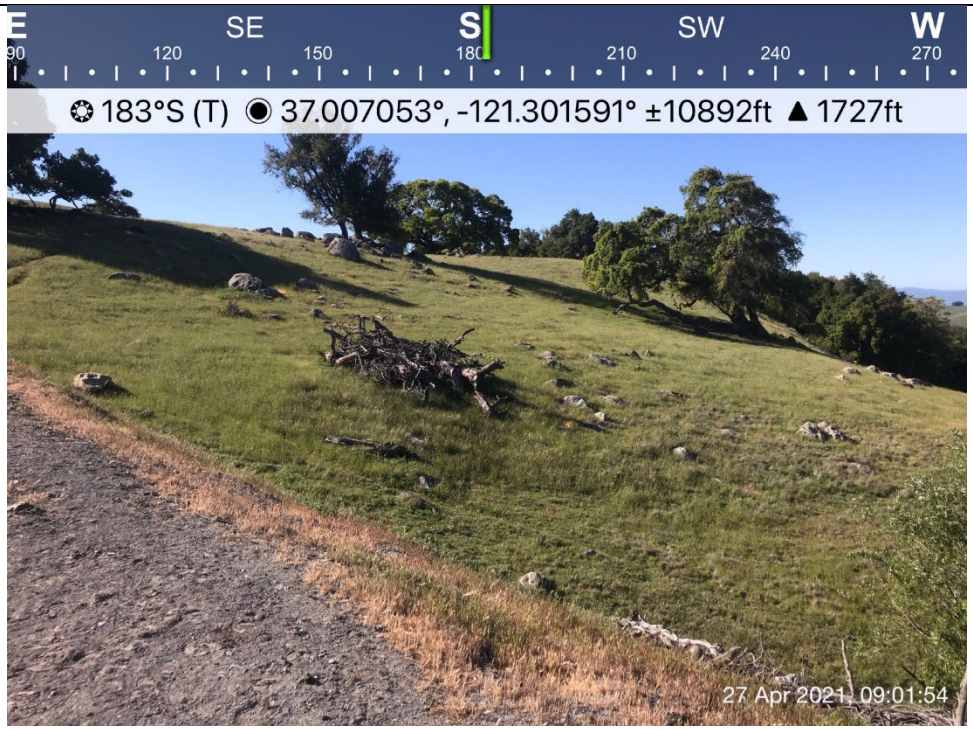


Photo 7: Location of piled trees that was believed to be removed.

Photo 8: Example of a stump that was not completely rotted and was alive when removed.

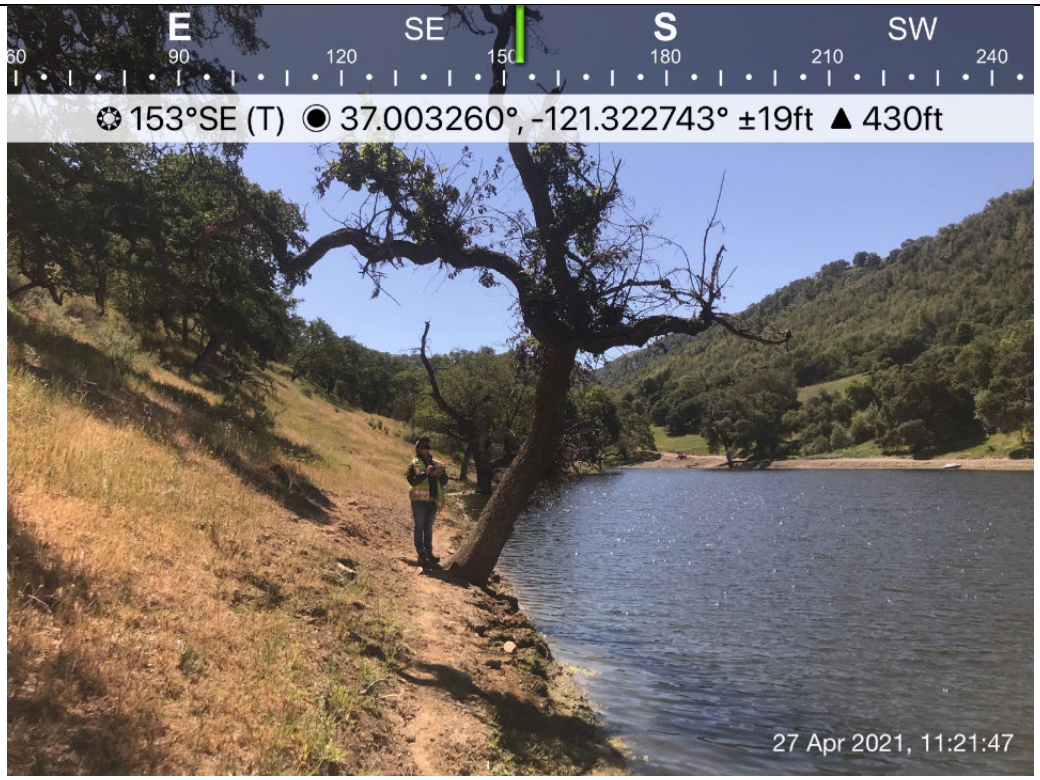
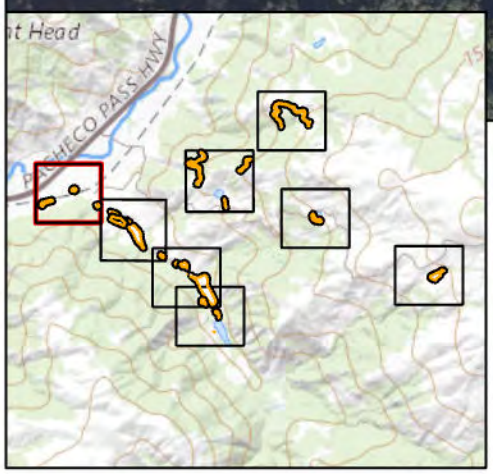


Photo 9: Tree 39 shown to still be alive along the lake formed by the Impoundment at Harper Creek.



Removed Tree (based on desktop review)

Violation Areas

Violation Areas (Grading)

0 65 130 260
Feet
Meters
0 20 40 80

N

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Page: 1 of 8

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Projection: Lambert Conformal Conic
Datum: NAD 1983 2011
Coordinate System: NAD 1983 2011 StatePlane California III FIPS 0403 Ft US

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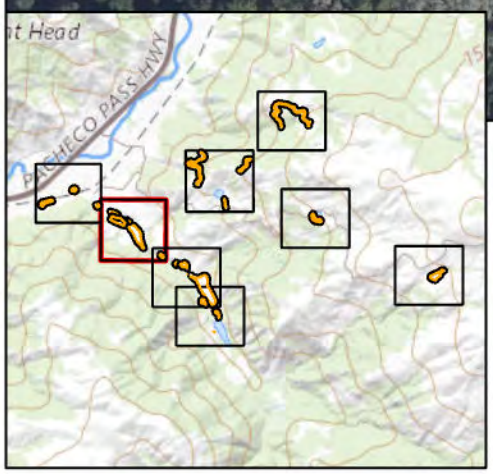

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Violation Areas

Violation Areas (Grading)

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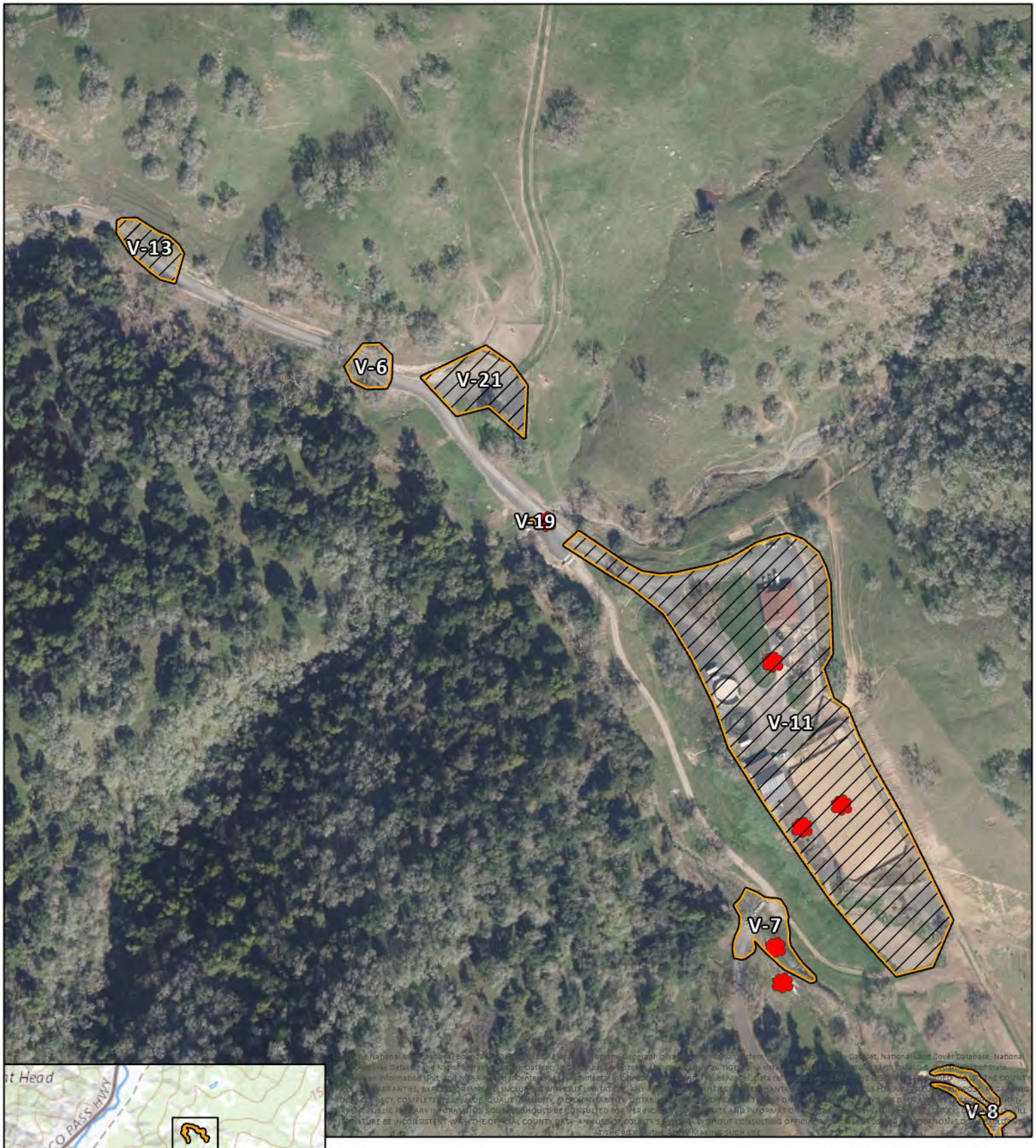

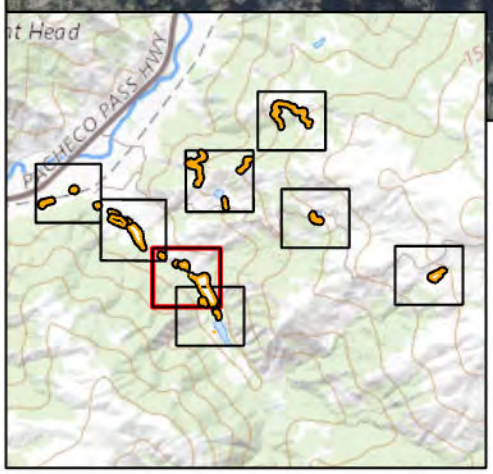

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Violation Areas

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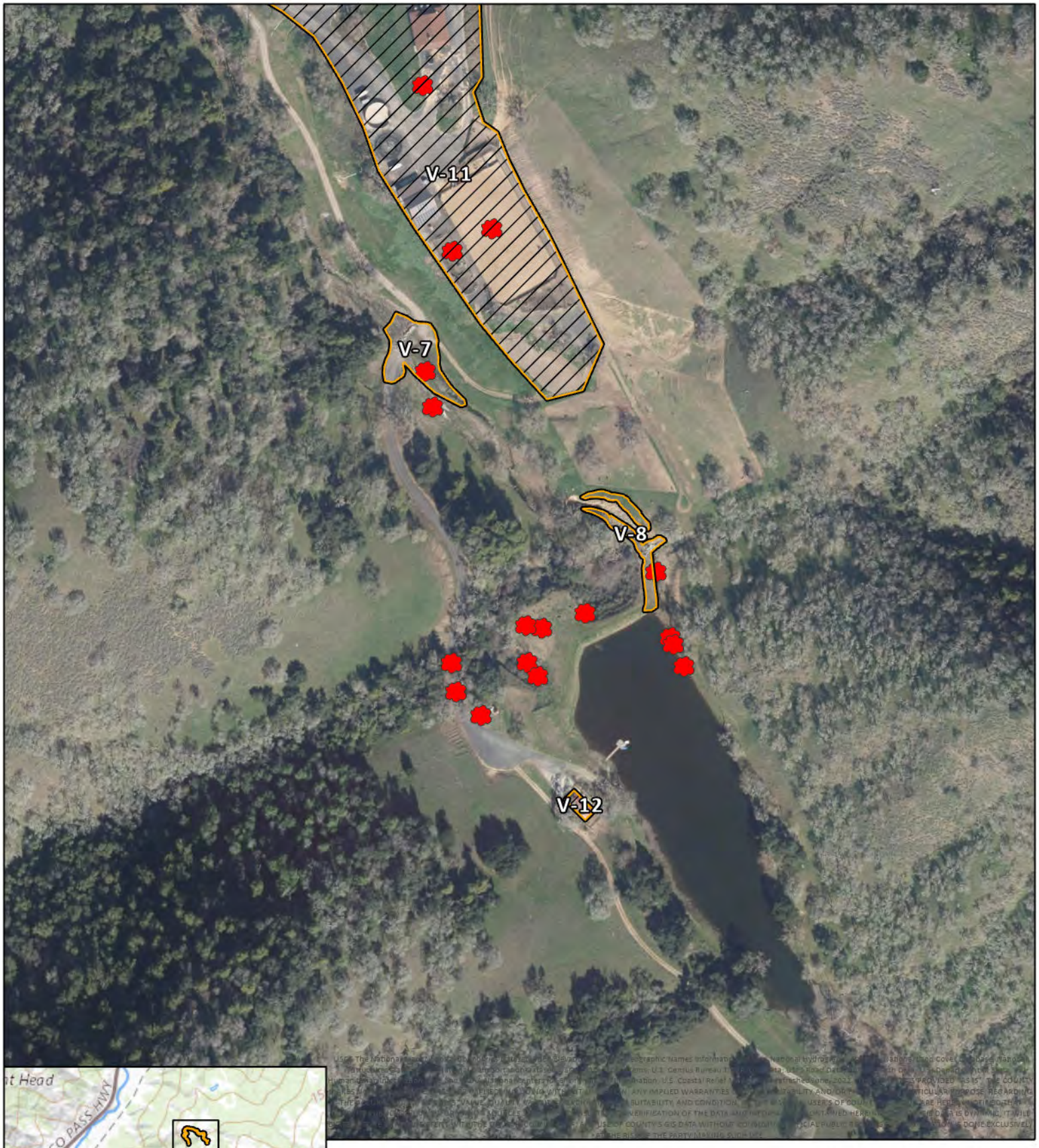

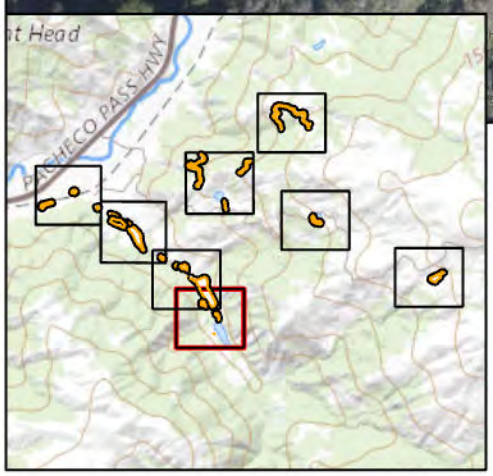

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Violation Areas

Violation Areas (Grading)

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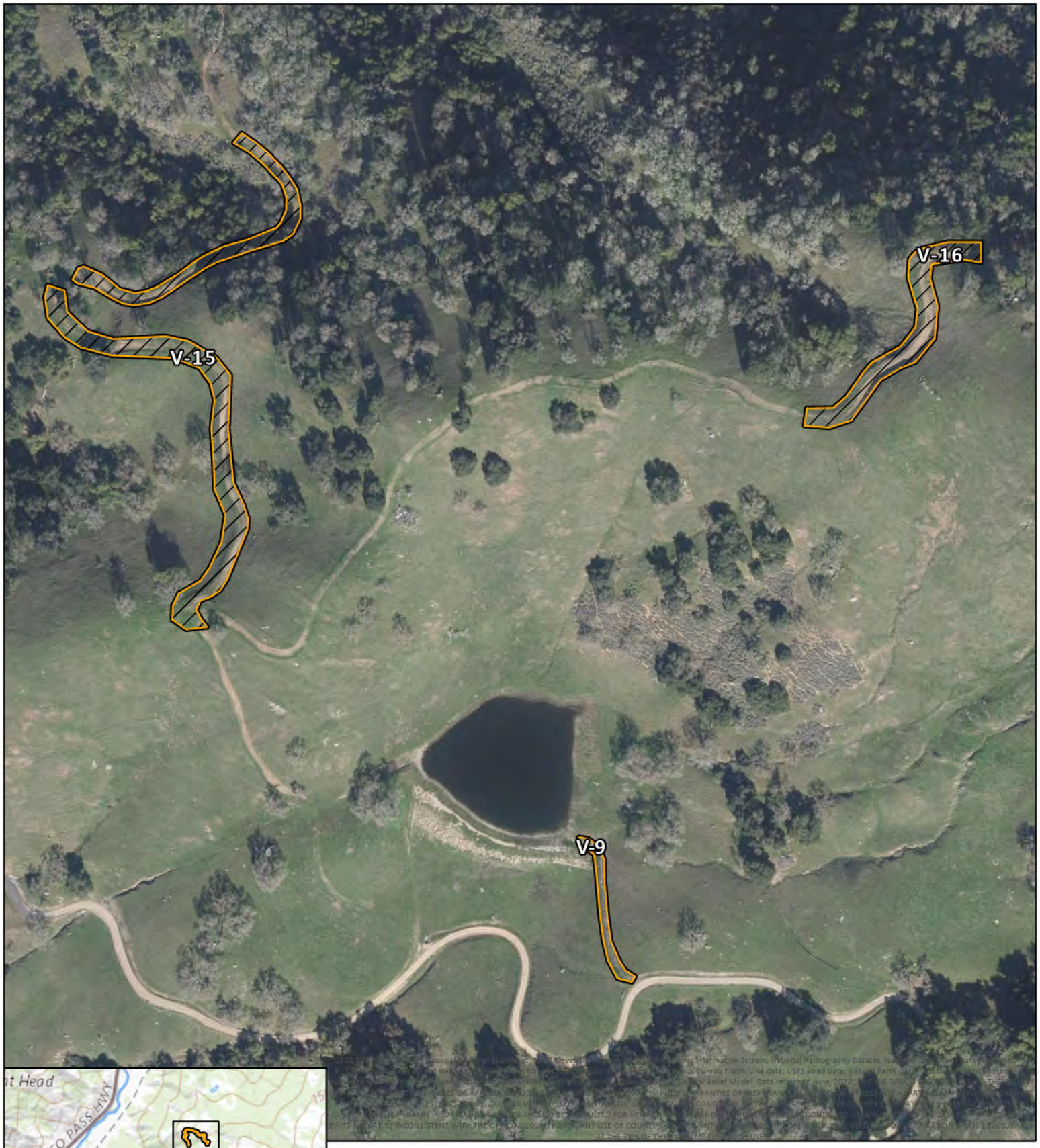

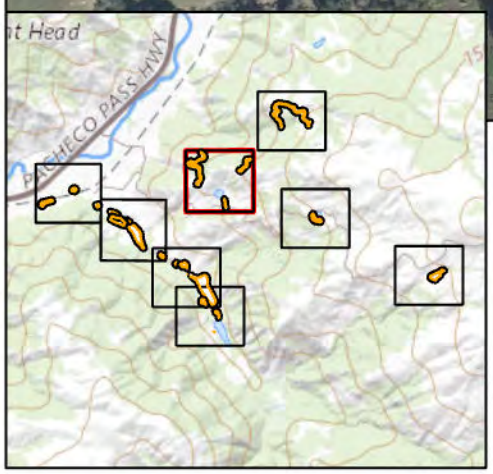

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Violation Areas

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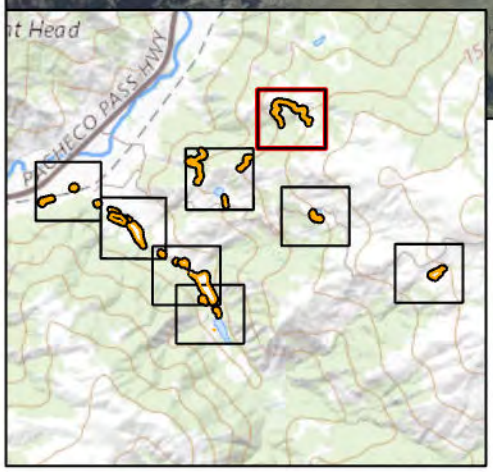

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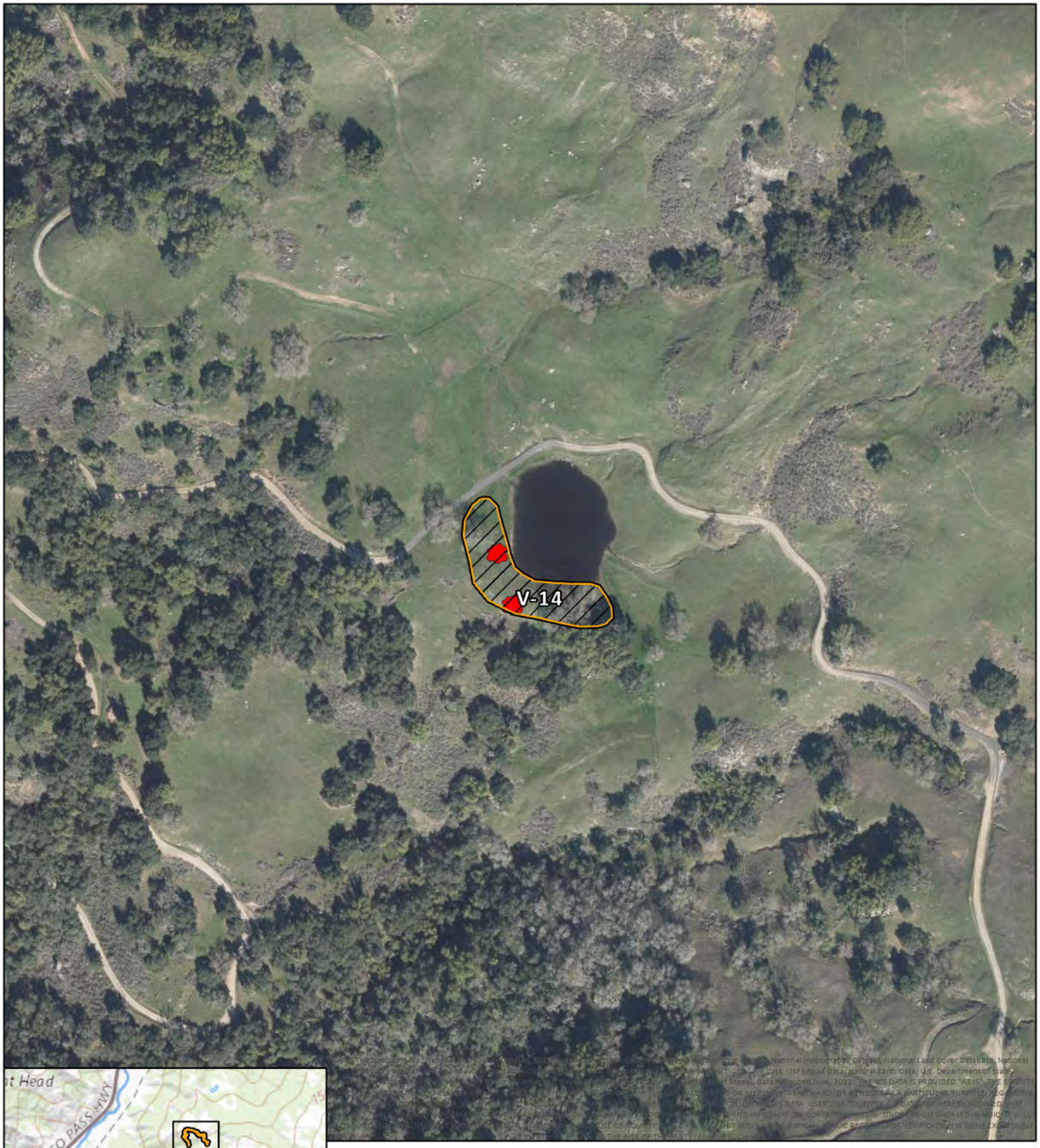

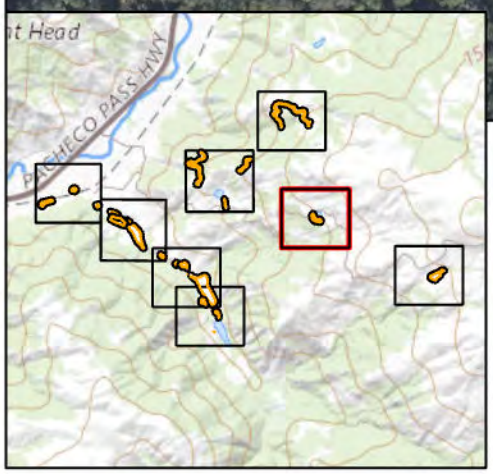

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Violation Areas

Violation Areas (Grading)

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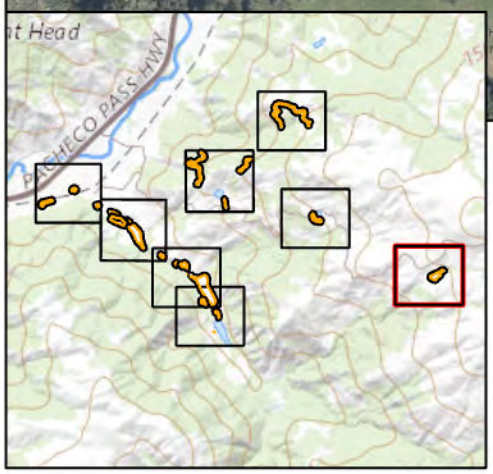

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Violation Areas

Violation Areas (Grading)

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Feet
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Appendix G

Santa Clara Valley Habitat Plan Screening Form

SANTA CLARA VALLEY
HABITAT AGENCY

City of Gilroy

City of Morgan Hill

City of San José

County of Santa Clara

Santa Clara Valley Water District

Santa Clara Valley
Transportation Authority

Santa Clara Valley Habitat Plan
COVERAGE SCREENING FORM

Habitat Plan Application File Number
(Assigned by jurisdiction)

Planning Office File Number
(Assigned by jurisdiction)

To determine if a project is eligible for coverage under the Santa Clara Valley Habitat Plan ("Habitat Plan"), complete and submit this form to the planning or building office of the applicable local jurisdiction (County of Santa Clara, City of Gilroy, City of Morgan Hill, or City of San José) as soon as possible in the development process.

*This form is used to evaluate if a private development project located within the Habitat Plan Permit Area is classified as a "covered project" under the Habitat Plan. Certain projects within the Habitat Plan Permit Area may **not** be covered projects under the Habitat Plan due to their location and size. This form is used to determine one of two conclusions and courses of action regarding a proposed project:*

*(1) A project **is not** a covered project under the Habitat Plan. Submit this form to the applicable local jurisdiction. No additional action regarding the Habitat Plan is needed.*[1]

*(2) A project **is** a covered project under the Habitat Plan. Submit this form to the applicable planning or building office along with the Fees and Conditions Worksheet when submitting applications for planning approvals.*

1. **Project Type (subdivision, conditional use permit, etc.)** Private

2. **Project Location (address / assessor's parcel number)**
898-19-043, 898-19-005, 898-19-003

3. **Project Description (including proposed use)**
Abatement of unpermitted grading. Will include restoration of existing stream channel to at or near pre-violation conditions, enhance the floodplain for restoration, replacement of existing bridge and culverts, rock-slope protection, reservoir spillway channel bed and bank erosion protection, restoration of dirt roads, and legalization of ponds and other grading violations. Proposed use is for residential and ranching.

A. Project Location

On the Private Development Areas map[2] (Figure 2-5 of the Habitat Plan), what area is the project located within? (check the applicable box below)

i. Private Development Covered ☒ *Go to Question C, page 2*

ii. Rural Development Equal to or Greater Than 2 Acres Covered ☐ *Go to Question B, page 2*

iii. Rural Development Not Covered ☐ *Go to Conclusion 1, page 3*

iv. Urban Development Equal to or Greater Than 2 Acres Covered ☐ *Go to Question B, page 2*

[1] See disclaimer under Conclusion 1 below regarding Endangered Species Act requirements.

[2] The Private Development Areas map can be viewed on the Habitat Agency Geobrowser at http://www.scv-habitatplan.org or GIS maps at each of the planning or building offices (Gilroy, Morgan Hill, San José, Santa Clara County).

B. Size of the Permanently Disturbed Footprint

What is the total size of the permanently disturbed footprint (not parcel size; see box below), in acres?

8.2

If the size of the permanently disturbed area is less than 2 acres, go to Conclusion 1, page 3.

If the size of the permanently disturbed area is 2 acres or greater, go to Conclusion 2, page 3.

***Calculating the Size of the Permanently Disturbed Footprint**: The permanently disturbed area is not the parcel size. It is determined by calculating the total land area that will be permanently affected by the proposed development project.*

This area includes all new buildings, new impervious surfaces (parking areas, roads, sidewalks, pools, etc.), and other areas that will be permanently affected by the project (lawns or formal landscaping areas, etc.). Refer to Exhibit A for calculating the Permanently Disturbed Footprint.

This area shall be shown on plans submitted with this Coverage Screening Form.

If necessary, the planning or building office reviewing this Coverage Screening Form may require this area to be calculated by a licensed professional (architect, engineer, surveyor) to verify accuracy.

C. Additions[3]

i. Is the project site currently developed?

- ☒ **YES** *Go to Question ii below*
- ☐ **NO** *Go to Conclusion 2, page 3*

ii. Does the project consist of total new impervious surface less than 5,000 square feet for (a) a building addition or (b) a new building within 50 feet of existing buildings?[4]

- ☐ **YES** *Provide area below in iii and go to Conclusion 1, page 3*
- ☒ **NO** *Go to Conclusion 2, page 3*

iii. What is the total impervious surface (see box below) that will be added (in square feet)?

1370

***Calculating Impervious Surface**: New impervious surfaces include all new buildings and paved areas (asphalt and concrete), such as parking areas, driveways, roads, sidewalks and pools.*

This area shall be shown on the plans submitted with this Coverage Screening Form.

If necessary, the planning department reviewing the Coverage Screening Form may require impervious surface area to be calculated by a licensed professional (architect, engineer, surveyor) to verify accuracy.

[3] A developed site means a site has existing permanent improvements, such as buildings and impervious areas, that were legally established prior to the Operative Date of the Habitat Plan (October 14, 2013). Review of building permits or aerial photos may be required by the planning department for verification.

[4] Building addition and new building area is cumulative effective October 14, 2013.

☐ **CONCLUSION 1** Project **is not** a covered project under the Habitat Plan.

Submit this Coverage Screening Form to the planning or building office with the applicable planning application (such as use permit, subdivision, etc.) for the project. Planning staff will evaluate and confirm the project is not a Covered Project. Verification of the absence of sensitive habitats, which may include photos and aerials of the site, may be required.

Sensitive Habitats: If the proposed project affects any wildlife and/or plant species covered by the Habitat Plan, or any unmapped burrowing owl occupied nesting habitat, serpentine, riparian, stream, pond, or wetland land covers on the property, then coverage under the Habitat Plan is required. Go to Conclusion 2, below.

Projects that are not covered projects under the Habitat Plan must still comply with Federal and State Endangered Species Act requirements. If a project has the potential to take a federally or state-listed plant or wildlife species, the applicant must contact the U.S. Department of Fish and Wildlife and/or the California Department of Fish and Wildlife to determine whether an endangered species permit should be obtained.

■ **CONCLUSION 2** Project **is** a covered project under the Habitat Plan.

Fill out the Fee and Conditions Worksheet and submit with verified land cover and this Coverage Screening Form to the planning or building office with the planning application (such as use permit, subdivision, etc.).

Property Owner Wyatt and Lacy Bourdet

Property Owner Signature _____ Date _____

Applicant _____

Applicant Signature _____ Date _____

Planning/Building Office Contact Information

City of Gilroy	City of Morgan Hill	City of San Jose	County of Santa Clara
7351 Rosanna St.	17575 Peak Ave.	200 E. Santa Clara St., T-3	70 West Hedding St., 7th Floor
Gilroy, CA 95020	Morgan Hill, CA 95037	San Jose, CA 95113	San Jose, CA 95110
Tel: (408) 846-0451	Tel: (408) 778-6480	Tel: (408) 535-3555	Tel: (408) 299-5770
Fax: (408) 846-0429	Fax: (408) 779-7236	Fax: (408) 292-6055	Fax: (408) 288-9798
www.ci.gilroy.ca.us/planning	www.morganhill.ca.gov	www.sanjoseca.gov/planning	www.sccplanning.org

If the project is not a covered project under the Habitat Plan and "opt-in" coverage from the Habitat Plan is desired, complete the Habitat Plan Application Form and submit it to the applicable local jurisdiction's planning or building office with the planning application. Opt-in coverage is not guaranteed and will be authorized by the local jurisdiction in consultation with the Habitat Agency.

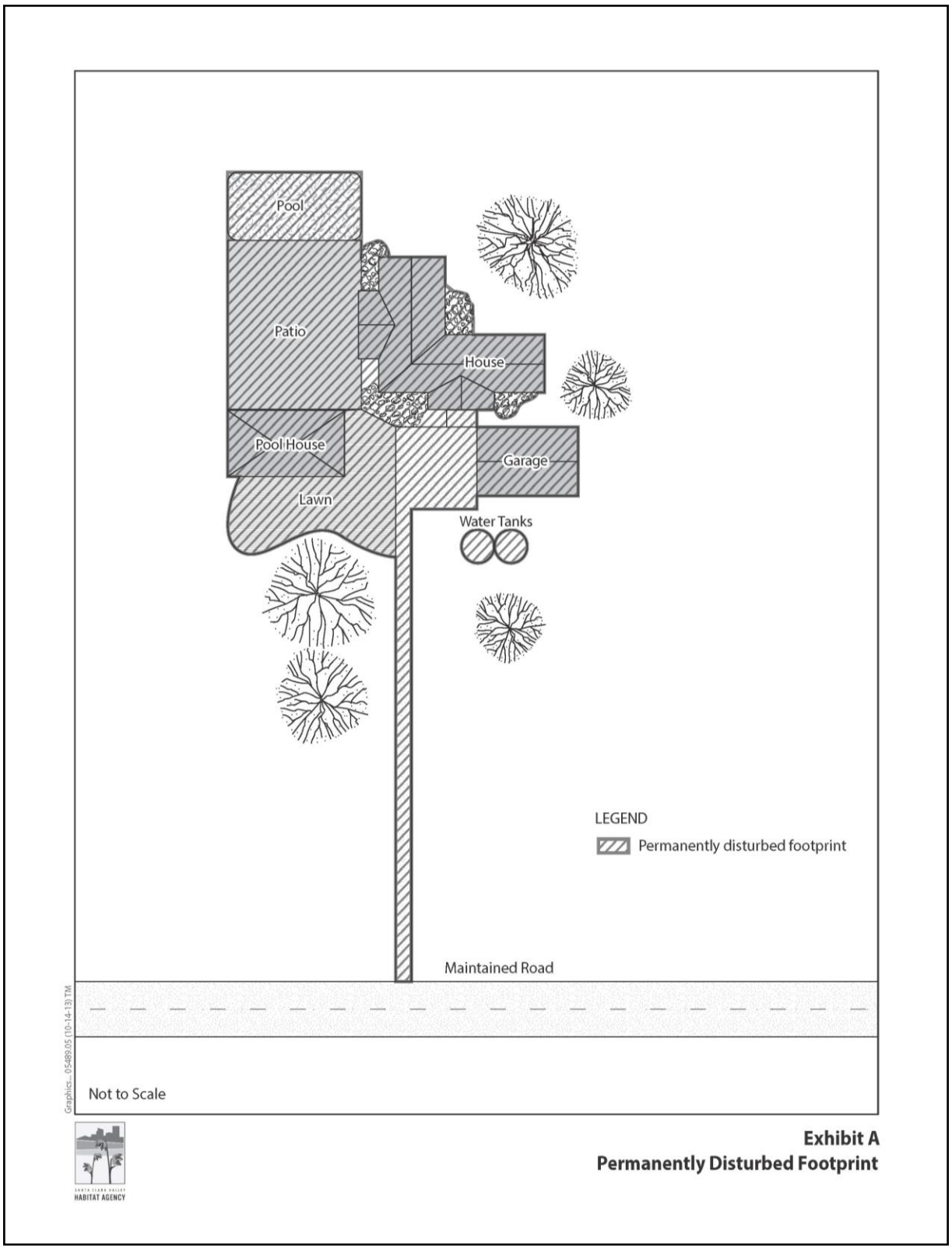
For Staff Verification Use Only

Project is Covered ☐ Project is Not Covered ☐ No Sensitive Habitats Located on Project Site ☐ Date _____

Project Planner _____

Phone Number _____ Email _____

SOURCES FOR THIS FORM: This form incorporates the policies contained within Chapter 2, *Land Use and Covered Activities*, of the Santa Clara Valley Habitat Plan, specifically subsection *Private Development Subject to the Plan*, beginning on Page 2-42.



Note: The permanently disturbed footprint depicted in Exhibit A is only used to determine if your project is eligible for coverage under the Habitat Plan. Exhibit 1 attached to the Fees and Conditions Worksheet and Application Form should be used to calculate project impacts, Habitat Plan fees, and conditions applicable to your project.

☐ **CONCLUSION 1** Project **is not** a covered project under the Habitat Plan.

Submit this Coverage Screening Form to the planning or building office with the applicable planning application (such as use permit, subdivision, etc.) for the project. Planning staff will evaluate and confirm the project is not a Covered Project. Verification of the absence of sensitive habitats, which may include photos and aerials of the site, may be required.

Sensitive Habitats: If the proposed project affects any wildlife and/or plant species covered by the Habitat Plan, or any unmapped burrowing owl occupied nesting habitat, serpentine, riparian, stream, pond, or wetland land covers on the property, then coverage under the Habitat Plan is required. Go to Conclusion 2, below.

Projects that are not covered projects under the Habitat Plan must still comply with Federal and State Endangered Species Act requirements. If a project has the potential to take a federally or state-listed plant or wildlife species, the applicant must contact the U.S. Department of Fish and Wildlife and/or the California Department of Fish and Wildlife to determine whether an endangered species permit should be obtained.

☒ **CONCLUSION 2** Project **is** a covered project under the Habitat Plan.

Fill out the Fee and Conditions Worksheet and submit with verified land cover and this Coverage Screening Form to the planning or building office with the planning application (such as use permit, subdivision, etc.).

Property Owner Wyatt and Lacy Bourdet

Property Owner Signature Wyatt Bourdet Lacy Bourdet Date 8-25-21

Applicant _____

Applicant Signature _____ Date _____

Planning/Building Office Contact Information

City of Gilroy 7351 Rosanna St. Gilroy, CA 95020 Tel: (408) 846-0451 Fax: (408) 846-0429 www.ci.gilroy.ca.us/planning	City of Morgan Hill 17575 Peak Ave. Morgan Hill, CA 95037 Tel: (408) 778-6480 Fax: (408) 779-7236 www.morganhill.ca.gov	City of San Jose 200 E. Santa Clara St., T-3 San Jose, CA 95113 Tel: (408) 535-3555 Fax: (408) 292-6055 www.sanjoseca.gov/planning	County of Santa Clara 70 West Hedding St., 7th Floor San Jose, CA 95110 Tel: (408) 299-5770 Fax: (408) 288-9798 www.sccplanning.org

If the project is not a covered project under the Habitat Plan and "opt-in" coverage from the Habitat Plan is desired, complete the Habitat Plan Application Form and submit it to the applicable local jurisdiction's planning or building office with the planning application. Opt-in coverage is not guaranteed and will be authorized by the local jurisdiction in consultation with the Habitat Agency.

For Staff Verification Use Only

Project is Covered ☐ Project is Not Covered ☐ No Sensitive Habitats Located on Project Site ☐ Date _____

Project Planner _____

Phone Number _____ Email _____

SOURCES FOR THIS FORM: This form incorporates the policies contained within Chapter 2, *Land Use and Covered Activities*, of the Santa Clara Valley Habitat Plan, specifically subsection *Private Development Subject to the Plan*, beginning on Page 2-42.

Appendix H

Violation Documentation

County of Santa Clara

Department of Planning and Development
Planning Office

County Government Center, East Wing, 7th Floor
70 West Hedding Street
San Jose, California 95110-1705
(408) 299-5770 FAX (408) 288-9198
www.sccplanning.org

November 23, 2020

Amanda Musy-Verdel
7651 Eigleberry Street
Gilroy, CA, 95020

FILE NUMBER: PLN20-139
SUBJECT: Grading Abatement Application
SITE LOCATION: 0 Pacheco Pass, Hollister (APN: 898-19-003, -005, -043)
DATE RECEIVED: October 22, 2020

Dear Mr. and Ms. Bourdet,

Your application for Grading Abatement Application has received on the above date and is deemed **incomplete**. For the application processing to resume, you must resolve the following issues and submit the information listed below.

Resubmittals are made via the internet, to do so, follow the instructions at the following URL: https://www.sccgov.org/sites/dpd/Iwantto/Permits/Pages/Permits.aspx. Before resubmitting, please consult me as this process is dynamic and at the time you choose to resubmit the process may have changed and / or been enhanced. The resubmitted materials must include all requested information. Once the information is submitted, Planning Office personnel will distribute the plans, reports, etc. to the appropriate staff or agency for their review.

If you have any questions about the information being requested, you should first call the person whose name is listed as the contact person for that item. He or she represents a specialty or office and can provide details about the requested information.

AS NOTED ABOVE, PRIOR TO RESUBMITTAL PLEASE E-MAIL ME TO DISCUSS THE PROCESS.

Please submit one (1) electronic copy of the revised plans / resubmittal documents with a written response addressing the following items.

PLANNING OFFICE
Contact Xue Ling at (408) 299-5784 or xue.ling@pln.sccgov.org regarding the following comments:

Lot Legality

1. Parcel configuration described on deed # 3120100 (Book 7510 of deeds, page 712) does not match the configuration of the current deed.

Please submit recorded documentation showing the legal creation of the project site. Submit recorded deed prior to June 25, 1969, the next consecutive deed conveying ownership from 6/25/1969 owner and the current deed. This information is necessary to ensure that the lot in its current configuration was conveyed before 1969 and thereafter.

The following deeds submitted with this application have been reviewed:

- Grant Deed #3120100 (Bk 7510 of deeds, page 712) recorded September 20, 1966.
- Grant Deed #5145962 (Bk B709 of deeds, page 572) recorded November 7, 1975.
- Grant Deed #4439999 (Bk O211 of deeds, page 656) recorded January 26, 1973.
- Grant Deed dated June 2/2011 – Please submit a recorded copy with the recorded date and document number.

All requested documents must be complete with no missing pages, the deeds must be legible, and if the deed includes more than one lot or parcel, note on the deed which description pertains to the requested parcel.

Site Plan

2. The submitted site plans (Sheet 2-15) do not provide all the required information for review. Please provide dimensioned and comprehensive site plans, including information as follows:
   a. Pre-violation topography identified with contour lines in dashed grey lines (see LDE comment #37 & 53).
   b. Pre-violation top of bank and water-bed location of any watercourses (see LDE comment #43).
   c. Pre-violation of all existing trees identified with the location, common names, and sizes (measured 4.5 feet above grade), if the driplines of the subject trees extend into the unpermitted grading areas. Please also mark the trees being removed (see LDE comment #38 and HCP comment #21).
   d. Topography of unpermitted grading in black lines, particularly for areas where the watercourses have been altered (see LDE comment #36 & 53).
   e. Unpermitted improvements, including the edge of pavement of the gravel roads and any impervious surfaces from the entrance of the property to the ADU by the lake.
   f. Unpermitted structures with the use noted on them, such as the residences, barns, kennel, cargo container, battery shed, bridge, retaining walls, etc.
   g. Limits of unpermitted grading with boundaries that identify areas to be restored, legalized, or partially legalized in detail (also see LDE comments #36 & 73).

Cross-sections

3. Please provide accurate site sections with consistent symbols that identify the unpermitted cut and fill (also see LDE comments #45, 46, & 67). (pre-violation & post violation)

Areas to be identified

Multiple areas of unpermitted grading or structures identified by County staffs and State review agencies have not been addressed in the application. Please provide the information as listed below, and identify whether the unpermitted grading, structures, or deposit of debris are proposed to be restored to the original condition, legalized, or partially legalized:

APN: 898-19-043

4. A large base rock stockpile was identified near the entrance to the property and adjacent to Harper Canyon Creek floodplain. Please identify the stockpile on the site plan with a note to remove it (see LDE comment #39).

5. The Notice of Violation issued by Fish and Wildlife identified *'grading of the creek bed, bank, and floodplain occurred along approximately 1,870 linear feet (0.36 mile) of Harper Canyon Creek, and along approximately 870 linear feet of an unnamed tributary to the west and approximately 400 linear feet of an unnamed tributary on the east.' 'The total area graded was measured to be approximately 4.66 acres.'* Please provide a site plan that identifies the unpermitted grading from upstream extent at 37.009120° N and 121.330541° W to downstream extent at 37.012868° N and 121.334512° W. In addition, please provide the pre-violation and post-violation stream bed and channel location to identify the recorded creek realignment (see LDE comment #43).

6. Multiple inspection reports identified two single 24-inch diameter culverts along two unnamed tributaries to Harper Canyon Creek downstream from the bridge. Please identify the location and sections of the culverts (see LDE comment #74).

7. Please identify the full extent of the building pad adjacent to the bridge and the building footprints of all unpermitted structures with current uses noted. According to Staff's inspection, unpermitted structures in proximity to the bridge area include a hay barn, a cargo container, a dog kennel, loading pens, a battery room equipped with a generator, and water tanks. Please note a) separate permits might be required to legalize the uses, b) a cargo container is not allowed in any Zoning Districts within the County jurisdiction.

APN: 898-19-005

8. Please identify the unpermitted grading at the paved staging area to the northwest of the primary residence. The staging area is located adjacent to the gravel road and connects a ranch road that climbs up the hills to the north (see LDE comment #48).

9. Please identify the entire paved impervious areas and complete footprints of all unpermitted structures at Area D (Sheet 5 and 6). Please also revise the names of the structures from 'existing' to 'unpermitted (residence, horse arena, etc.) to be legalized'.

10. Multiple inspection reports identified that a dam was created on the north shore of the lake with significant cut. *'The banks had been eroded and were 10 feet high with a close to vertical slope.*' (Notice of Violation by CDFW). Please identify the unpermitted grading at this location.

11. In addition, the spillway had been rerouted from the west of the bank to the east of the bank. Please identify the unpermitted grading on the site plan with sections and details of current spillways (see LDE comment #50).

12. Notice of Violation by CDFW identified a total of approximately 17 concrete blocks installed within the eastern spillway, and 23 concrete blocks deposited within the creek bed and bank

downstream of the lake. Please identify the concrete blocks on the site plan (see LDE comment #52).

13. Notice of Violation by CDFW identified the creek bed and channel (37.004666° N and 121.324691° W) had been diverted approximately 105 feet to the northeast to 37.004890° N and 121.324522° W. Please identify the pre-violation contours and top of bank, and post-violation contours and top of bank for Staff to verify.

14. A plastic double culvert of 30-inch diameter was installed with cast-in-place concrete. Please provide the location and details of the culvert. It appears the culvert was installed incorrectly, and *'the channel water would not be properly directed into the culverts.'* Should you propose to legalize the culvert at this location, please provide proper engineering details prepared by a licensed civil engineer to reinstall the culvert.

15. Please provide the pre-violation and post-violation contours of the horse arena to identify the unpermitted grading recorded in the inspection report.

16. One unpermitted accessory dwelling unit (ADU) is located on the west bank of the lake. Please provide the 35-foot riparian setback measured from the top of the bank and the floor area of the ADU. The ADU shall be located outside of the riparian setback with a maximum floor area of 1,200 square feet. NOTE: please be aware of the location of the ADU is dependent upon County staff being able to make all the Grading Findings on the lot. See Issues of Concerns below.

Archaeological Review

17. The proposed project area has the possibility of containing unrecorded archaeological site(s). Based on an evaluation of the environmental setting and features associated with known sites, Native American resources in this part of Santa Clara County have been found throughout the Santa Clara Valley near intermittent and perennial watercourses and near the hill to valley interface. The proposed project area is located within alluvial valley lands of Santa Clara Valley in an area between former tributaries, as depicted on historic maps. Given the similarity of one or more of these environmental factors, there is a moderate potential for unrecorded Native American resources in the proposed project area. Please provide an archaeological report prepared by a professional archaeologist listed on the Secretary of the Interior's Standards as shown at http://www.chrisinfo.org/ -The study must include, but not be limited to: field study, hand auger sampling, shovel test units or other geoarchaeological analyses which are used to identify the presence of archaeological resources.

Santa Clara Valley Habitat Plan Review

Contact Colleen Tsuchimoto at (408) 299-5797 or colleen.tsuchimoto@pln.sccgov.org regarding the following comments:

18. Updated HCP Screening Form signed by the property owner.
    a. Project Description should show describe all work associated with the Grading Abatement including also the ranch roads, stock ponds, restoration of grading to pre-graded conditions.

b. The site is not located in Area 2 – Rural Development Equal to or Greater than 2 Acres Covered; therefore Question B should not be filled out.
c. Question C – Is the project site currently developed? - Fill out Yes as there are existing structures on the site. Currently the box is checked no which is incorrect.

19. Land Cover Verification with Mapping prepared by a qualified biologist to verify the habitat land covers impacted and species impacts within the proposed development area. HCP covered species include but are not limited to Tri Colored Blackbird, San Joaquin Kit Fox, CA Red Legged Frog, CA Tiger Salamander, CA foothill yellow legged frog). HCP serpentine plant species include Smooth lessingia, Fragrant fritillary, Metcalf Canyon jewelflower, Most beautiful jewelflower, Tiburon Indian paintbrush, Coyote Ceanothus, Santa Clara Valley dudleya, , Mount Hamilton thistle, Coyote ceanothus, and Loma Prieta hoita. Within the land cover verification and mapping report – provide survey for potential impacts to grassland, riparian species, and serpentine species.

20. Site Plan should be revised to show the proposed development and all grading abatement areas, land cover types in the development and any relevant landforms – including but not limited to: roads, water bodies, the creek top of bank and centerline, rock outcrops, the edge of pavement, road shoulders, existing and proposed structures that will be impacted by the proposed project, and all proposed improvements (i.e. drainage, landscaping, culverts etc.). Please label creek setback from top bank of Pacheco Creek – 200 ft. setback (Category 1 HCP stream), and all other tributaries and swales setbacks of 25 ft. from top of bank of waterway (Category 2 HCP stream), including but not limited to tributaries of Pacheco Creek and Harper Canyon.

21. Tree removal plan - (provide type (species) and approximate diameter of all trees that were removed. CDFW's violation report notes numerous CA native sycamore and oak trees removed.

Williamson Act Contract

Please contact Joanna Wilk (408) 299 5799 or joanna.wilk@pln.sccgov.org if you have any questions regarding the Compatible Use Review.

22. The subject property, located at 0 Pacheco Pass (APN: 898-19-003, 898-19-005, 898-19-043, etc.), is restricted by Williamson Act contract. The estimated new impervious area associated with the proposed work exceed 500 square feet and a Compatible Use Determination is required. Please submit a complete Williamson Act Compatible Use Determination application with required submittal materials to the Planning Division for review. The Guideline for Compatible Use Development on Restricted Lands and Williamson Act Compatible Use Determination application checklist are available at the Planning Office website located at
https://www.sccgov.org/sites/dpd/Iwantto/Permits/Pages/WA.aspx
NOTE: As the information was not submitted, Staff was unable to analyze the project for Williamson Act Compatible Use. As such, more comments may arise at the resubmittal of the application.

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

Contact Kristin Garrison at Kristin.Garrison@wildlife.ca.gov for information regarding the following items.

Area D, Sheet 7 - Areas around the Harper Canyon Creek impoundment.

23. Staff finds it challenging to support the proposal to "legalize" the current condition. Based on inspection and viewing from Googlearth, both the western and eastern drainage from the Harper Canyon Creek impoundment had extensive bank erosion. Please propose remediation activities designed by a geomorphologist with stream restoration expertise to stabilize the bank and bed of both the western and eastern drainage.

24. The eastern drainage existing condition includes 17 very large concrete blocks installed within the bank and bed of the drainage. Please provide designs for stabilization of the eastern drainage bed and bank based upon the condition after the removal of the concrete blocks.

25. Please provide grading design of the upstream end of the eastern drainage with analysis by a qualified biologist to provide appropriate flows for downstream habitats and special-status species.

Area C, Sheet 6 - Creek Crossing Area Downstream of the Harper Canyon Creek impoundment

26. Staff objects to the proposal to "legalize" the creek realignment. The creek bed and channel had been diverted approximately 105 feet to the northeast in the low water crossing area, resulting in a loss of approximately 34 linear feet of stream. The grading abatement should include re-establishing the creek to the pre-violation location. Please provide designs developed in coordination with geomorphologist with stream restoration expertise.

27. The existing crossing condition includes 23 large concrete blocks installed within the bank and bed of the drainage. Please provide designs based upon the condition after the removal of the concrete blocks.

Double Culvert Crossing on a Tributary to Harper Canyon Creek

28. There was erosion of bed and bank observed around the double culverts located at 37.007039° N and 121.326002° W. It seemed that the culverts were not properly aligned or of appropriate length. Poured concrete at the downstream end of the culverts was not preventing erosion. Please propose a culvert design with sufficient diameter to convey debris and sediment loads, as determined through hydraulic calculations. Associated grading design should include appropriate slope protection to stabilize the road fill, tributary banks, and tributary bed.

Single Culvert Crossings on Tributaries to Harper Canyon Creek

29. Two single culvert crossings had been installed at 37.010242° N and 121.330686° W and 37.012771° N and 121.335371° W. Please propose a culvert design with sufficient diameter to convey debris and sediment loads, as determined through hydraulic calculations. Associated grading design should include appropriate slope protection to stabilize the road fill, tributary banks, and tributary bed.

Area A, Sheet 3 - Bridge on Harper Canyon Creek and Areas Graded to the South of the Bridge.

30. Staff finds it challenging to support the proposal to "legalize" the bridge as is. The low flow channel is located along the western bridge footing, and erosion along the western footing was observed. Please provide a hydraulic analysis to assess the appropriate bridge dimensions that will convey debris and sediment loads and to resist the erosion of the creek bed and banks in the bridge location. If the hydraulic analysis supports requires replacing or realigning the bridge, please propose grading design accordingly.

31. Staff objects to the proposal to "legalize" the graded area. In the review of Google Earth aerials, an extensive area of Harper Canyon Creek had been graded and realigned upstream and downstream of the bridge. The creek bed and channel had been diverted approximately 170 feet to the west, resulting in a loss of approximately 170 linear feet of stream. Please propose grading abatement that includes re-establishing the creek bed/low flow channel to the pre-violation location. Designs should be developed in coordination with geomorphologist with stream restoration expertise.

Road Construction

32. The road along Harper Canyon Creek had been widened, and crumbled asphalt had been placed on top of the road surface. Only a portion of the road was addressed (Area B). The NOV discusses concerns over crumbled asphalt toxins potentially being released into groundwater or channel water. The NOV recommends analysis and potential removal of crumbled asphalt. If the crumbled asphalt needs to be removed, please propose a grading design for the area of the existing road.

Sheet 1 and Sheet 17

33. Sheet 1, Air Quality Landscaping and Erosion Control, #11 it says that all exposed disturbed areas be seeded with brome. Please note that Bromus is a very large genus of grass that includes many non-native species. Staff recommends using native Bromus seed (or other native grass).

34. Sheet 17, #13 states that hydroseeding may be required and lists three species: common barley, annual ryegrass, and crimson clover. The species names were not provided; however, all three of these species appear to be non-native. Staff recommends proposing native species. The erosion control design map is still under review, and the comments will be forwarded to you shortly.

CENTRAL COAST REGIONAL WATER QUALITY CONTROL BOARD

Contact Mark Cassady at Mark.Cassady@Waterboards.ca.gov for information regarding the following items.

35. Only portions of the unpermitted activities on the subject property are addressed in the application. The applicant proposes to "legalize" the majority of the grading addressed in the application. It is implied that the existing (post-violation) conditions are being proposed to remain as-is, and remedial work is only proposed at the three ponds and removal of some ranch access roads. The Central Coast Regional Water Quality Control Board (Central Coast

Water Board) requires that grading violations that resulted in damage to State waters (Harper Canyon Creek and its tributaries) be remediated, and the impacts be mitigated through appropriate compensatory restoration.

Please submit engineered designs with input from qualified hydrologists, geomorphologists, biologists, and restoration ecologists as necessary to restore creek beds and banks to natural conditions, in order to repair erosion, construct properly sized and stabilized creek crossings, and restore Central California sycamore alluvial woodland.

NOTE: please refer to Attachment B for complete comments from Water Board.

LAND DEVELOPMENT ENGINEERING

Contact Darrell Wong at (408) 299-5735 or darrell.wong@pln.sccgov.org for information regarding the following items.

36. Clearly show the limits of all the disturbed area as a result of the unpermitted site work on the plans. Provide a quantity table on the cover sheet broken down by the different areas of the unpermitted and remedial work. Please reference historical aerial photos in conjunction with topography to aid in determining limits of disturbance.

37. Clearly differentiate the topographic survey lines from before the violation and after the violation. The current topographic survey is very difficult to differentiate.

38. Clearly identify all the existing trees in the disturbed areas and identify all of the trees that were removed as a part of the unpermitted grading.

39. Address the stockpile of material at the front of the property. The stockpile must be removed and the original grade restored or it shall be legalized if that is even possible.

40. Address the turnaround area at the corral at the front of the property. That area appears to have been filled and raised up slightly. Photos from 2018 show stockpiles of material near the corral that appears to be eventually spread in that area. Please provide a plan for abatement or legalization of that fill or demonstrate that the area consists of original ground with the appropriate field site investigation and report.

41. Show location of flood plain on plan. All grading and site development shall be subject to the requirements of the County Floodplain Ordinance and the FEMA Floodplain requirements. All restorative work and work to legalize the bridge will require a no rise certificate.

42. Demonstrate that the bridge is constructed as a free-span crossing that provides a minimum of two feet of free board above the base flood elevation.

43. Verify the topography of the site dated prior to the grading work being performed in the creek. The creek appears to have been straightened from the aerial photos dated in the winter

of 2015-2016. The creek bed and route of the creek should be shown to be restored to the maximum extent practical.

44. Please provide stationing along the gravel roads so that the extent of the improvements are clearly shown on the plans.

45. Clarify the section details. Some areas of fill/cut are hatched, while others are not. Please be consistent.

46. Please double check the vertical depths on the section details. The vertical intervals are divided into twenty feet intervals and the vertical labels appear to be identified as ten-foot intervals. Depending on what needs to be adjusted, the grading quantities may require to be adjusted and recalculated to account for the discrepancy.

47. If all the work on Sheet 4 is to remain, demonstrate how that work is the minimum necessary to establish the use of the property. How is the grading to support a 20' wide road the minimum necessary for the development? How is the fill on the southwest side of the creek shown on sections C1, C2, and C3 on Sheet C4 necessary for the development?

48. Show the widening and the new/widened crossing along the road prior to the final slop up to the main residence. The area where the road forks up to the residence has been completely regraded. There is an additional area prior to the final crossing before the road finally slopes up to the residence that have been re-graded into a staging area at the intersection of the ranch road leading up the hillside. These areas of violation shall be fully documented/abated. Section details will be required through these areas.

49. Please provide documentation that the berm at the existing stock pond where the spillway was relocated was not raised. Provide field evidence such as exploratory boring that additional material wasn't placed on top of the existing berm. If this can't be demonstrated, please restore the berm to its original grade or apply for legalization of the heightened berm.

50. Provide a plan to restore the original spillway to its original location and a restoration of the eroded relocated spillway location with engineered fill and slope stabilization.

51. Remove all concrete placed on the site in the spillway violation.

52. Show the full extent of the gravel grindings placement along the ranch roads in general. There is a large placement of grindings to expand the ranch road just before reaching the secondary dwelling unit that either must be removed and restored, or must be legalized.

53. Supplemental topographic survey is required in addition to the aerial topography provided. There are just not sufficient details shown on the aerial topography to adequately document the limits of the disturbance and the unpermitted grading and improvements, especially with regards to the widening and improvements of the ranch roads and driveways, as well as the cut and fill pads.

54. Please provide a Drainage Plan that demonstrates the following items:
    a. the site including all the site development can be adequately drained,
    b. the proposed development will not cause problems to the nearby properties,
    c. the proposed development is not subject to significant damage from the one percent flood,
    d. the on-site drainage will be controlled in such a manner as to not increase the downstream peak flow or cause a hazard or public nuisance. If this cannot be demonstrated, provide a detention system pursuant to the Design Guidelines in Section 6.3.3 of the 2007 Santa Clara County Drainage Manual.

55. Please demonstrate that the driveway shown on the plan conforms to County Standard Detail SD5. The current driveway appears to be much wider than the standard SD5 driveway section. Please demonstrate why the driveway must remain so wide and how the amount of grading for the development is the minimum necessary. If this can't be demonstrated, the width of the driveway must be reduced and the grading for the driveway restored/reduced to match that of the SD5 standard.

56. Please revise the driveway plan and section to conform to County Standard Detail SD5.

57. Please provide the necessary driveway turnarounds at the structures which conform to County Standard Detail SD16.

58. Please include all applicable easements affecting the parcel(s) with benefactors and recording information on the site plan. Please supply two copies of a preliminary title report, dated within 60 days of the day of submittal with the next submittal.

59. Please provide a drainage system to adequately route flows from the developed site to the natural outfall.

60. Please clearly identify all retaining walls necessary to establish the grading shown with appropriate top and bottom of wall elevations. Please provide typical sections of all proposed walls. Any site walls located within the limits of the floodplain shall be identified and comply with the requirements of the Floodplain Ordinance. The necessary flood vents shall be provided as necessary.

61. Show drainage system from the drivable surfaces and roof drains on plan. Provide an appropriately sized storm water detention and treatment area as necessary to comply with the Central Coast Regional Board requirements and the requirements of the County grading ordinance.

62. This project is located within the Central Coast watershed and includes greater than 5000sf (non-SFR) of net new impervious area. Please provide Stormwater Treatment Measures per section E.12 of the Central Coast Regional Board requirements. Show any grading required to provide such treatment on the plans.

63. This project is located within the Central Coast watershed and includes greater than 15,000sf of new impervious area. Please provide Stormwater Treatment and Control Measures per section E.12 of the Central Coast Regional Board requirements. Show any grading required to provide such treatment on the plans.

64. Fill out the Post Construction Requirement packet for the Central Coast Watershed. Provide Post Construction Requirement improvements, as necessary.

65. Document all excavated material from the pond at area #4 which was piled on the outer berm of the pond. The elevation difference of the pond shall be clearly shown in the plans. If that fill is proposed to be legalized in place on the berm, a geotechnical engineer's investigation and letter will be required to verify the stability of the heightened berm. Any work to stabilize the berm as a result of years of erosion as a result of the overtopping of the berm shall be shown on the plans. Provide section details through the berm.
66. Any additional impoundment of runoff as a result of the proposed expansion or creations of the stock ponds shall be permitted appropriately by any concerned state and federal agencies. Please apply for the necessary clearances and authorizations from the necessary agencies.

67. Adjust the cross-section details H1, H2, and H3 with more exaggeration. The vertical scale doesn't show much of any detail for these sections.

68. Provide rough grading details as to how the swale will be restored. What will come of the concentrated flow along the dirt ranch road? Will the roadside drainage be modified in such a manner so that the flow is no longer concentrated?

69. Does a spillway need to be re-created for the stock pond shown on sheet 9? How will erosion as a result of overtopping the limits of the berm be controlled otherwise?

70. Provide a section detail through the earthen dam to be removed on Sheet 10.

71. Clearly show the access roads associated with the access to the construction and access of the new stock pond to be removed on Sheet 10. The in-line culvert under the new ranch road should be show to be removed if this area is to be restored.

72. Clearly show the rough grading required to restore the area shown on sheets 10 and 11. Label the proposed and existing contours on the sheet.

73. Clearly show the limits of the grading and disturbance on the grading, both unpermitted, and restorative on the plans.

74. Show existing unpermitted culverts to be removed on sheets 11,12, and 13.

75. Clearly show the gravel road section that is proposed to serve the development. Show any ancillary grading that is required to lay down the pavement surface.

76. Show the creek crossing and the bridge on the driveway profile.

ENVIRONMENTAL HEALTH

Contact Darrin Lee at (408) 299-5746 or darrin.lee@cep.sccgov.org for information regarding the following items:

77. On a revised set of grading plans, locate and show the existing septic tank and leach fields serving the main house and the lake house. Graphically show the extent of the proposed grading abatement activity in and around the vicinity of the existing septic systems.

FIRE MARSHAL OFFICE

Contact Alex Goff at (408) 299-5763 or alex.goff@sccfd.org for information regarding the following items.

78. Scope of Work to clarify the project proposal. The current Scope of Work appears to state this is to restore areas to original condition on the Cover Page of the Plans. The online workflow and the justification for grading state's grading for ranch roads, stock ponds, driveway, bridge, house, arena, cottage, barn, and other structures.
    a. The following comments are for access to existing structures, Fire comments may change when further information is given.
    b. Review of the structures were not conducted at this time (water supply, sprinklers, etc.).

79. Driveway (serving no more than 2 lots) to have a minimum drivable width of 12 ft.

80. Driveway to be made of an "all weather" material capable of holding 75,000 pounds.

81. Fire department turnaround meeting CFMO-SD16 and PRC-4290 to be clearly shown on the plans.

82. Appropriate signing, including but not limited to weight or vertical clearance limitations, one-way road or single traffic lane conditions, shall reflect the capability of each bridge.
    a. Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with the American Association of State and Highway Transportation Officials Standard Specifications for Highway Bridges, 17th Edition, published 2002 (known as AASHTO HB-17).
    b. Documentation that the bridge can hold 75,000 pounds is needed if the bridge is a part of the fire department access.

ADDITIONAL INFORMATION / ISSUES OF CONCERN

1. The applicant proposes to legalize the majority unpermitted grading that are addressed in current application. Staff has concerns with the existing conditions being proposed to remain as is and may not be able to make the required Grading Findings. Unpermitted activities on the property include replacement of a low-water crossing with an archway bridge across Harper Canyon Creek, grading of the creek bed and banks upstream and downstream of the bridge, rerouting of the creek upstream of the bridge, installation of dual culverts under the road leading to the new home driveway, relocation of the reservoir spillway, placement of

concrete blocks and rerouting of Harper Canyon Creek at the spillway and downstream of the reservoir, modifications/construction of stock ponds with resultant creek diversions and erosion, and significant grading for crossing, building pads and horse arenas. The above-mentioned grading endangers public and private property, impairs the existing watercourse, creates significant impacts to the natural landscape, scenic, biological and aquatic resources, and results in erosion. Please note each area or item to be legalized is subject to all seven Grading Findings per County Ordinance Code (See Attachment A).

2. The grading approval is subject to the requirement of the California Environmental Quality Act (CEQA). An environmental assessment (EA) undertaken by or under contract to the Planning Office at the applicant's expense might be required to determine the impact of the project on the surrounding environment.

Unpermitted Structure

83. There are multiple unpermitted structures including one single-family residence and one ADU. Please note for grading associated with a new building or development site, Grading Approval shall be granted to the building site that minimizes grading in comparison with other available development sites, taking into consideration other development constraints and regulations applicable to the project. Staff has concerns with the current house location.

Santa Clara Valley Habitat Plan Review

Contact Colleen Tsuchimoto at (408) 299-5797 or colleen.tsuchimoto@pln.sccgov.org regarding the following comments:

3. The subject property is located in the Santa Clara Valley Habitat Plan area and the Private Development Area is designed Area 1: Private Development Covered. According to the HCP Geobrowser mapping, land cover appears to include CA Annual Grassland, Seasonal Wetland, Mixed Serpentine Chaparall, Northern Mixed Chaparral/Chamise Chaparral, Mixed Oak Woodland and Forest, Blue Oak Woodland, Serpentine Rock outcrop/Barren, Serpentine Seep, Serpentine Bunchgrass/Grassland, Mixed Riparian Forest and Woodland, Pond. See attached comprehensive HCP Geobrowser landcover map, and GIS waterways map for reference.

4. Wildlife and Plant surveys for grassland species, riparian species and serpentine species are required. The site is located in CA Red Legged Frog Critical Habitat of US Fish and Wildlife Service, and CA Natural Diversity Database shows recently sightings of CA Tiger Salamander, CA Red Legged Frog and CA Foothill yellow legged frog on the subject property and adjacent properties.

5. Note: Habitat Plan coverage will be required. Any development that affected any wildlife and/or plant species covered by the Habitat Plan, or any unmapped burrowing owl occupied nesting habitat, riparian, stream, pond, wetland, oak woodland, and serpentine habit requires coverage under the Habitat Plan. See Fees & Conditions Worksheet and Fee Schedule for reference.

HCP documents including the HCP screening form, Habitat Plan Application, and Fees information are at the below weblink:
https://scv-habitatagency.org/250/Private-Applicant

NOTE: please note there are cost differences between temporary and permanent habitat impact fees. Permanent fees are more costly. Please take special notes of the potential costs associated with the remediating / legalizing the improvements on this property.

Prior to resubmittal, please feel free to contact me to schedule an appointment so we can meet and discuss my comments regarding the project.

Please make sure the requested changes are made for the revised plan sets and documents that are needed for the resubmittal. **Resubmittals are only accepted by appointment with the assigned project planner.** If the requested information is not submitted within **180 days**, you will be required to pay a fee of 10% of the application fee at the time the information is submitted. All requested information must be submitted no later than **one (1) year** from the date of this letter. PARTIAL RESUBMITTALS WILL NOT BE PROCESSED. Fees required at the time of resubmittal will be those in effect at that time.

Please note that the Grading Abatement Application have been charged a minimum fee and will be charged additional fees to continue processing when the initial payment is exhausted.

In submitting this land use application, the owner/applicant included an initial application fee. Application fees are categorized as "fixed fees" and "billable fees", based on the particular application types. "Fixed fee" applications do not require any additional fees to continue processing. However, when funds associated with a "billable fee" application have been spent, an additional deposit will be required to continue processing the application.

If you have questions regarding the application, please contact me at (408) 299-5784 or xue.ling@pln.sccgov.org.

Warm regards,

Xue Ling
Associate Planner

cc:
Darrell Wong, LDE
Darrin Lee, DEH
Alex Golf, FMO
Glen Jia, PLN
Colleen Tsuchimoto, PLN
Joanna Wilk, PLN
Kristin Garrison, CDFW
Mark Cassady, Waterboards

County of Santa Clara

Department of Planning and Development
Planning Office

County Government Center, East Wing, 7th Floor
70 West Hedding Street
San Jose, California 95110-1705
(408) 299-5770 FAX (408) 288-9198
www.sccplanning.org

October 26, 2021

Amanda Musy-Verdel
7651 Eigleberry Street
Gilroy, CA, 95020

FILE NUMBER: PLN20-139
SUBJECT: Grading Abatement Application
SITE LOCATION: 0 Pacheco Pass, Hollister (APN: 898-19-003, -005, -043)
DATE RECEIVED: August 26, 2020

Dear Mr. and Ms. Bourdet,

Your application for Grading Abatement Application has received on the above date and is deemed **incomplete**. For the application processing to resume, you must resolve the following issues and submit the information listed below.

Resubmittals are made via the internet, to do so, follow the instructions at the following URL: https://www.sccgov.org/sites/dpd/Iwantto/Permits/Pages/Permits.aspx. Before resubmitting, please consult me as this process is dynamic and at the time you choose to resubmit the process may have changed and / or been enhanced. The resubmitted materials must include all requested information. Once the information is submitted, Planning Office personnel will distribute the plans, reports, etc. to the appropriate staff or agency for their review.

If you have any questions about the information being requested, you should first call the person whose name is listed as the contact person for that item. He or she represents a specialty or office and can provide details about the requested information.

AS NOTED ABOVE, PRIOR TO RESUBMITTAL PLEASE E-MAIL ME TO DISCUSS THE PROCESS.

Please submit one (1) electronic copy of the revised plans / resubmittal documents with a written response addressing the following items.

PLANNING OFFICE
Contact Xue Ling at (408) 299-5784 or xue.ling@pln.sccgov.org regarding the following comments:

Lot Legality

1. Staff is unable to verify the lot legality of separate APNs with the submitted documents. Please see the detailed comments in Attachment A.

Site Plan

2. The submitted two sets of site plans ("Plans" and "Plans - Harper Canyon Restoration") do not provide all the required information for review. Please provide dimensioned and comprehensive site plans, including information as follows:
   a. Where new grading is proposed, please provide proposed contour lines in linework different from pre-violation and existing contour lines.
   b. "Plans - Harper Canyon Restoration" provides the pre-violation, existing, and proposed top of bank of all watercourses. Please provide said information in all plan sheets including all the sheets of the other plan set ("Plans").
   c. Harbor Canyon Creek setback (Category II Stream).
   d. Unpermitted improvements, including the edge of pavement of the gravel roads and any impervious surfaces from the entrance of the property to the ADU by the lake.
   e. Unpermitted structures with the use noted on them, such as the residences, barns, kennel, cargo container, battery shed, bridge, retaining walls, etc.
   f. Site plan shall include the entire driveway.
   g. Limits of unpermitted grading with boundaries that identify areas to be restored, legalized, or partially legalized in detail on all plan sheets. The driveway shall be included in the violation area to be legalized as the driveway was significantly widened in the past few years and was part of the violation record (VIO-9270).

Cross-sections

3. Please update site sections to include information of the pre-violation, existing, and proposed grade lines in three different line types ("Plans" and "Plans - Harper Canyon Restoration").

Grading Quantity Table

4. The project proposes to restore to pre-violation condition, legalize the occurred grading, or propose additional grading at different areas of the site. Please provide grading quantity table that separate the grading quantity for restoration, legalization, and newly proposed grading.

Biological Report

5. Please provide an enlarged Valley Habitat Plan Land Cover Map (Figure 6). The violation areas shall include the entirety of the gravel driveway as the driveway was significantly widened as part of the violation record (VIO-9270).

6. Please provide enlarged maps to illustrate the location of potential habitats of the special-status plants and animal species.

Arborist Report

7. Appendix E identifies the trees located within or adjacent to the grading abatement areas. Please provide the boundaries where new grading is proposed on all maps of Appendix E to illustrate the potential impacts to the trees to remain.

8. Please locate the 39 trees being removed on the maps, based on aerial and foot survey.

9. Please provide tree protection measures and plans for all trees to retain that might be impacted by the project.

Archaeological Review

10. Please submit an archaeological report prepared by a qualified archaeologist. Study # 4300 (Carrell et al. 1975) and Study # 5222 (King and Hickman 1973), in total covering less than 10% of the proposed project area, identified one or more cultural resources. The proposed project area contains the archaeological sites; P-43-000069, P-43-000070, and P-43-000129. All Native American resources consisting of habitation and temporary camp sites, tool processing areas, and petrogylphs. It is recommended that a qualified professional archaeologist update the conditions of these sites on Office of Historic Preservation's DPR 523 resource recordation forms, assess potential impacts of the proposed project activities on these resources, and provide project-specific recommendations as warranted.

Santa Clara Valley Habitat Plan Review

Contact Colleen Tsuchimoto at (408) 299-5797 or colleen.tsuchimoto@pln.sccgov.org regarding the following comments:

11. Updated HCP Screening Form signed by the property owner. Can you please confirm that all permanent impact areas equate to the 1,370 sq. ft. impervious surface listed on the form? If it is incorrect, please update it.

12. Please update Figure 6 land cover verification map of the biological report. The report described the total acreage for all the land covers for the impacted areas - this needs to be put onto a map on the legend of Figure 6 included with the report.

13. Update biological report.as sightings or potential for American Badger and Burrowing Owl are documented on the property per documentation in the biology report. Staff disagrees with the assessment the surveys are not required for these species which is inconsistent with the biology report conclusions that there is potential habitat for these species.

14. Plans should be updated as the following information was not provided as previously required. Both top of bank and center line of creek must be labeled on plans. The top bank of creeks were provided in the plan set - but center line was not identified. Please label creek setback from top bank of Pacheco Creek – 200 ft. setback (Category 1 HCP stream), and all other tributaries and swales setbacks of 35 ft. from top of bank of waterway (Category 2 HCP stream), including but not limited to tributaries of Pacheco Creek and Harper Canyon.

15. Tree removal plan - Where is the attachment of the tree removal plan itself? A report by an arborist was provided that described all the trees removed. A plan is required to show all the areas on the plan where trees were removed.

Williamson Act Contract

Please contact Joanna Wilk (408) 299 5799 or joanna.wilk@pln.sccgov.org if you have any questions regarding the Compatible Use Review.

16. The subject property, located at Pacheco Pass Highway (APNs: 898-19-003,-005,-029,-033,036,037) is restricted by Williamson Act contract 73.153. The total area of all parcels is over 3,000 acres of nonprime land. The Pre-Screening application is for a Grading Abatement to address unpermitted grading in association with ranch roads, stock ponds,

house, barn arena, and bridge. The estimated new impervious area associated with the unpermitted work exceeds 500 square feet and a Compatible Use Determination is required for legalization of the development. Please submit a complete Williamson Act Compatible Use Determination application with required submittal materials to the Planning Division for review. The Guideline for Compatible Use Development on Restricted Lands and Williamson Act Compatible Use Determination application checklist are available at the Planning Office website located at http://www.sccplanning.org

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

Contact Kristin Garrison at Kristin.Garrison@wildlife.ca.gov for information regarding the following items.

17. Sheet R9: The designs do not clearly show where rock will be placed. Designs should be revised to include rock symbols (such as in sheet R11) in the plan (most importantly), profile, and cross section views. Please also be consistent with RWQCB comments regarding alternatives to this crossing to eliminate or reduce vehicle crossing within the creek channel water.

18. Sheet R12: Cross Section F shows a very steep (near vertical) slope on the right bank. This section of the bank should be graded to stabilize the slope.

19. Sheet 11, eastern pond impoundment: Please be consistent with RWQCB's comment. The designs do not show remediation for the erosion that occurred between the pond and lower creek. The designs should show grading to return to pre-violation condition.

20. Both design sets: The Biological Resources Report states that the culverts will be replaced or realigned, and erosion repaired. However, there is not specific engineering/restoration designs for the culvert crossings. There are also not specific designs for the proposed riffles or the bridge. The designs should include plan, profile, and cross section views for all of culvert, riffle, and bridge locations, at a scale where details can be clearly seen by the reviewer.

21. Biological Resources Report, Table 1 and Section 3.1.2, engineering designs: Double culvert replacement and restoration of grade is discussed, but there is not discussion regarding the poured concrete at the downstream end of the culvert. This concrete should be removed. Rock rip rap may be needed to prevent further bank and bed erosion. The engineering/restoration designs should include the concrete removal and, if needed, rip rap. The Biological Resources Report should include this information as well.

22. Design Basis Report and Designs: There was not discussion regarding road crumbled asphalt leaching or potential dislodging by channel water (see CDFW NOV for details). If there is a potential for leaching into groundwater or for crumbled asphalt material to be deposed into the creek during flooding, there may need to be grading to remove this material. The Design Basis Report (or other document) can explain the analysis and results. The designs should sow any grading that would need to be done.

23. Design Basis Report, biological resources report, designs: These reports do not address the stock ponds to be legalized. The hydroperiod and pond water depths must be sufficient to support all life stages of target native amphibians and reptiles. These documents should include:
    a. Discussion of the target species for which each pond to be legalized
    b. Analysis of hydrology, including location and size of spillways and water control structures to achieve the needed hydroperiod and pond water depth for the target species.

24. Designs and Design Basis Report: Analysis should be conducted to determine the appropriate Harper Canyon Creek impoundment upper spillway elevation that will provide appropriate flows downstream habitats (e.g. Central California sycamore alluvial woodland) and for special-status species potentially present (e.g. California red-legged frog and western pond turtle). If additional grading may be needed, this grading should be included in the designs.

25. Restoration designs and engineering designs, Basis of Design: The restoration designs should include a planting plan that includes revegetation of trees removed (see CDFW NOV and Biological Resources Report Appendix F. Tree Removal Memorandum). The Basis of Design, or other document, should explain the trees removed and the ratios of replacement. The restoration designs should show where trees are to be planted.

26. Restoration and engineering designs: Both designs should include reseeding of bare soil areas with native grass (or native grass/wildflower mix).

CENTRAL COAST REGIONAL WATER QUALITY CONTROL BOARD
Contact Mark Cassady at Mark.Cassady@Waterboards.ca.gov for information regarding the following items.

Note: The plans resubmitted on August 30, 2021 appear to address all the areas in which violations occurred that impacted waters of the State. This includes restoration of Harper Canyon stream channel and floodplain, bank stabilization, bridge replacement, culvert repairs, access road removal, ford crossing improvement, reservoir spillway repair, and stock pond outlet repair. Additional details for each activity that may affect waters of the State will be required with an application for 401 Water Quality Certification. The 401 application must be completed in accordance with the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State, and include detailed engineering plans and project descriptions, quantifications of temporary and permanent impacts to waters of the State, an alternatives analysis as specified for a Tier 3 project, and a compensatory mitigation and monitoring plan that fully mitigates for the temporary and permanent impacts to waters of the State. Specific comments on the resubmitted plans are below.

27. The restoration of existing dirt roads that are being removed should be included with any restoration and monitoring plan that is developed to ensure the areas are stabilized and the vegetation is adequately established.
28. On Table 1 of the Biological Resources Report, please add a column to show the plant communities/habitats that were impacted.

29. Abatement at V-10, East Cattle Stock Pond Impoundment, needs to also include repair/restoration of the eroded gully.

30. Section 6.4.1 refers to "Sycamore Alluvial Wetland" habitat~~. I think this should~~ Change this to be woodland, not wetland. It also refers to 4.24 acres of temporary impacts and 5.39 acres of permanent impacts. Please confirm these impact calculations as they seem high and they are different from what is presented in the HCP fee calculator worksheet.

31. Section 6.4.6, Pond. As noted above, the restoration of the eroded gully at pond V-10 needs to be included with the plans to add a sluice gate and outfall. In addition to the permanent impacts to the stream from construction of the stock pond, impact calculations must also take into consideration the length and area of the stream that was cut off from flow. This would be the distance from the face of the impoundment to where the erosion gully re-enters the stream. Finally, what assurances are there that this pond will be adequately maintained in order to preclude bullfrogs?

32. The basis of the design of the ford crossing needs to be better substantiated. Alternatives must be evaluated in accordance with the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. Practicable alternatives should be evaluated and presented, to include looking at different crossing designs, reestablishing the crossing at the original ford and channel location, and routing the access in other potential locations including relocating the entire road to the east past the horse arena and across the top of the reservoir dam.

Santa Clara Valley Water District
Contact Benjamin Hwang at bhwang@valleywater.org or Yvonne Arroyo at yarroyo@valleywater.org for information regarding the following items.

33. Staff from Valley Water deems this project incomplete. Please see the detailed comments in Attachment B.

LAND DEVELOPMENT ENGINEERING
Contact Darrell Wong at (408) 299-5735 or darrell.wong@pln.sccgov.org for information regarding the following items.

34. Clearly show the limits of all of the disturbed area as a result of the unpermitted and proposed site work on all of the plans, be it grading, plan and profile, or WLW plans. The disturbed limit line shall clearly be shown and identified on the plans. Provide an itemized quantity table on the cover sheet broken down by the different areas of the unpermitted and remedial work. The quantities of disturbed areas may be broken down on the table by sheet or area of work for clarity.

35. Provide a quantity table on the cover sheet for all aspects of grading broken down by the different areas of the unpermitted and remedial work. The quantities of grading areas may be broken down on the table by sheet or area of work for clarity. If the grading quantities are further broken down within the sheet(s) for even further clarity, that may be helpful as well

to make the determination that all unpermitted work and all proposed abatement is fully accounted for.

36. Please provide a drainage system to adequately route flows from the developed site to the natural outfall.
    a. Provide a drainage design to accommodate the uncontrolled runoff flowing toward the development on Sheets 6 and 7. The preliminary drainage capture and routing to discharge and treatment areas mush be shown on these plans.
    b. Please provide a preliminary drainage design for the runoff from the unpermitted structures proposed to be legalized and clearly show the routing of the flow to the treatment and mitigation areas on Sheets 6 and 7.
    c. Specify whether the culverts installed on Abatement Area #1 on Sheets 13 and 14 will be removed or legalized.
    d. Drainage elevations shall be shown on the plans for the unpermitted culverts, that cross the access driveway, to be legalized and permitted.
    e. Show drainage system from the drivable surfaces, including driveways and turn arounds, and roof drains and structures on plan. The collection of the concentrated flows from the widened and improved gravel roads are not shown on the plans or details of the roads.
    f. The concentrated drainage that was routed to the pond in area #4 used to cut across the field between the two turns in the jeep road and connect the culvert going under the road. If that will not be restored, the work to remove that swale shall be shown on the plans and the new road-side swale shall be shown to be established as a part of this proposal for grading. Otherwise, the swale between the turns can be shown to be restored as a part of the abatement. Provide rough grading details as to how the swale will be restored or how the new road-side swale will be established.
    g. Show the routing of drainage runoff from hillsides collecting at the toe of slope and drainage terraces.
    h. Show how runoff will be routed from impervious and other developed areas resulting in a concentrated flow will be routed to the required detention and storm water treatment areas.
    i. Show how the impervious development as a result of the development on sheet 4 will be drained. The unpermitted structures will generate increased runoff and the preliminary drainage plan will need to show how this is to be handled and discharged.

37. Please provide additional detail for the preliminary grading plans including the following:
    a. Provide a section cut through the berm to document the fill placed on the downhill side of the berm on Area #4,
    b. Clearly show the additional gravel imported and placed to improve the road section that is proposed to serve the development.
    c. Clearly show the topography of the proposed contours(may be post violation to be legalized). Pre-violation contours shall not overlap with existing contours if they are one in the same and no work was performed in those locations.
    d. Please show the conforms of the grading and the unpermitted work proposed to be legalized on the section details for sheet 4,
    e. Please provide a section of the grading proposed to be legalized in place for the hay storage area on sheet 6, Area D.

f. The plans for abatement don't properly document the widened/heightened berm. Please appropriately document the work performed in this location of the pond shown in Area #4. A section, or possibly two, needs to be shown cut through the fill placed on the berm shown on Area #4.
g. Show location of flood plain on the WLW plans.
h. The sections cut through the unpermitted arena don't match the elevations shown on the plan view on Sheet 7. Please correct the sections and show the section elevations that match the plan view.
i. If the spillway at abatement area #4 for the pond supposedly functions, why do the original violation photos show overtopping and erosion rivulets occurring on the expanded berm? Please provide an explanation as to how the existing berm apparently overtopped when it is about 4' above the spillway.
j. The fill to eliminate the previous spillway is required to be shown on Sheet 8, Abatement Area E. If the previous spillway is not being restored, the work to eliminate it must be shown on the plans. Provide a section for the fill through that area.
k. Clearly reflect all of the existing trees in the area of the work which were identified as removed per the Sequoia report as a part of the unpermitted grading.
l. Provide a section cut transverse through the berms for Area #4 and #6 to clearly show the extent of the fill material placed to create or widen the berms.
m. The plans for Area #6 are not fully clear as to where the cut quantities originate. Was the base of the new pond excavated? If so, the section views should clearly depict those cuts in the section. Show the limits of the excavated area on the plan view.
n. Show the existing unpermitted overflow of Area #6 and the resultant eroded hillside as a result of the overflow which was created. Show how those areas will be either legalized, restored, or mitigated.
o. The WLW plans should provide additional sections for the proposed grading at approximately stations 20+25 and 23+80 where the greatest amount of work is being proposed and where work typical of the area is proposed.
p. Provide the proposed grading required for the rip rap swale overflow for Area #6.
q. Verify the cut and fill heights shown on the sections cut through Abatement Area Plan #3. The stated approximate fill depths appear to be under what the sections actually show.
r. Show the conforms of the violation condition and the restored/pre-violation condition on sections for Areas #1, #2, #3. The sections don't show the unpermitted work conforming with the existing conditions. The sections need to show the full extent of the work.
s. All section cuts shall show the vertical heights measured from the top of cut to the toe of cut and the top of fill to the toe of fill. The current heights show on the sections show the-deepest depth of cut/fill. For instance, the cut depth shown on section P19 is 3.6' +/-, but it should be shown as possibly near 5'+/-. The Cut on Section P17 may be in excess of 15'. You will need to verify these depths on your sections, in general.
t. The sections shown on sheet 17 show the current conditions, but do not show the conditions prior to any of the work being performed. These sections should show an approximation of the work which has taken place and any work to restore and/or further expand upon the development.
u. The plan and profile as well as the proposed grading abatement plans should show the limits of work depicted on the plans.

v. Provide a plan and profile sheet at a more reasonable scale such as 1" = 20' or 1"=30' so that appropriate details can be shown. At the current scale, grading and any grading differences on the profile are difficult to depict.
w. Is there a thickness of rock/grindings placed on the expanded access? Please note that unpaved driveways and access roads with binders are considered impervious surfaces when they are considered for stormwater treatment mitigation. Provide a typical section of the unpaved surfaces to be legalized or proposed as a part of this project and include the surface area as necessary for the Post Construction Requirement packet.
x. The WLW plans need to provide an additional section for the proposed grading at approximately station 20+25 shown on sheet R6 where the greatest amount of work is being proposed.
y. The culverts crossing the access driveway were identified as modified/replaced without a permit. These should be identified as needing to be legalized/replaced/restored on both the WLW and H&B plans.
z. The sections on Sheet 5 appear to depict unpermitted grading and expansion to the ranch road. The plan view only identifies a tiny area of violation that doesn't adequately reflect the sections. The plans need to be corrected to fully identify the extent of the violation areas.

38. Provide an appropriately sized storm water detention and treatment area as necessary to comply with the Central Coast Regional Board requirements and the requirements of the County grading ordinance. Treatment is required for all stormwater runoff from impervious areas of this development, not just the commercial aspects of the development. Please provide appropriate treatment facilities for the impervious area including the house and barn per the Central Coast Regional Board requirements.

39. Fill out the Post Construction Requirement packet for the Central Coast Watershed. Provide Post Construction Requirement improvements.

40. The grading quantities around the development appears to be severely underestimated/ understated, in general. Please revisit the grading quantity estimate and adjust the estimate accordingly.
    a. The section of cut and fill within the creek restoration plan on sheets R4 &R6/Abatement Area B doesn't appear to be accurately reflected in the quantity table and is severely underestimated on the estimate table.
    b. The quantities for the grading of Abatement Area A are not reported on the quantity table.
    c. Itemize the grading quantities for Sheet R9 separately on the grading quantities table.
    d. The fill quantities for the material placed on top and widening the existing berm on Area #4/Sheet 9 need to be included in the quantity table. Any grading quantities required to restore the previous swale and restore the unpermitted swale can be itemized and provided on sheet 9 separately for Area #4 with the total of the Area #4 grading provided on the cover sheet table.
    e. The grading quantities as a result of the grading in Area D on sheets 6 and 7 appear to be severely under reported.

f. Itemize the eroded channel quantities as a result of the unpermitted spillway created at the main pond. Differentiate between the eroded quantities and the proposed abatement quantities required to stabilize and create the permitted overflow spillway.

41. Show the plan and profile station line along the access driveway on the grading plans. There appears to be a gap in the abatement plans between Areas C and D /Sheets 5 and 6 showing the extent of the driveway widening and improvements.

42. Should the project site include multiple legal parcels, please provide the appropriate easements/covenants of easements to provide access over the front parcels to the parcels in the rear.

43. Please clearly show the Lands of USA as it passes through APN 898-19-042. It doesn't appear to be shown on sheet 3 for Abatement Area A. Legal access will be required through that area and must be demonstrated for any access through to the development.

FIRE MARSHAL OFFICE

Contact Alex Goff at (408) 299-5763 or alex.goff@sccfd.org for information regarding the following items.

44. Parcel is located within the State Response Area (SRA) and the Wildland Urban Interface (WUI).
    a. Parcel to maintain defensible space.
    b. PRC-4290 to be met.
    c. Structures to meet Chapter 7A of CBC.

45. Plans are to clearly describe the proposed scope of work. Including each structure to be legalized (any arena's or pens to be labeled as covered or non-covered.

46. The size of the structures, occupancy type and construction type is needed to determine how much water will be needed in accordance with CFMO-W1.
    a. Plans to state if the Arena is covered or not as this may affect the water requirement.
    b. Plans to state if site/structures are intended for private residential use or non-private residential. Non-residential use is to meet NFPA-1142 water requirements.

47. Fire sprinklers to be listed as deferred for all structures that are proposing sprinklers.
    a. The County Ordinance describes circumstances when sprinklers would be required.

48. Appropriate signing, including but not limited to weight or vertical clearance limitations, one-way road or single traffic lane conditions, shall reflect the capability of each bridge.
    a. Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with the American Association of State and Highway Transportation Officials Standard Specifications for Highway Bridges, 17th Edition, published 2002 (known as AASHTO HB-17).
    b. Documentation that the bridge can hold 75,000 pounds will be needed at Building Permit. The plans are to state the bridge will be capable of holding 75,000 pounds.

49. Plans are to show fire hydrant/s to be located within 400 ft. path of travel to non-sprinkled structures or 600 ft. of sprinklered.
    a. Hydrants to be listed as (N) new or (E) existing and standard or wharf.
    b. Above ground water tanks to be shown for any proposed fire protection systems.
    c. Any proposed wharf hydrants and water tanks are to meet CFMO-W1, W4 and W5.

50. All parts of structures to be within 200 ft. exterior path of travel to fire department access. The nature of structures such as the Arena are unknown at this time and may not meet the requirement if the structure is covered.

51. Plans to show dimensions of all turnarounds meeting CFMO-SD16.

CalFire

Contact Carlos Alcantar at Carlos.Alcantar@fire.ca.gov for information regarding the following items.

Note: This project (Record No. PLN20-139) is located within the State Responsibility Area (SRA) and is recommended to follow all minimum wildfire protection standards of California Code of Regulations Title 14 Natural Resources Division 1.5 Department of Forestry Chapter 7 - Fire Protection Subchapter 2 SRA Fire Safe Regulations Articles 1-5.

52. Article 2 Emergency Access and Egress

    § 1273.00. Intent
    Roads and driveways, whether public or private, unless exempted under 14 CCR §1270.02(d), shall provide for safe access for emergency wildfire equipment and civilian evacuation concurrently, and shall provide unobstructed traffic circulation during a wildfire emergency consistent with 14 CCR §§ 1273.00 through 1273.09.
    2) Road Surfaces: Road and Driveway will need to support 75,000 lbs with an aggregate base: Ensure Road and Driveway conforms to the Fire Safe Regulations Road Surface Standards.

    § 1273.02. Road Surfaces
    a. Roads shall be designed and maintained to support the imposed load of fire apparatus weighing at least 75,000 pounds and provide an aggregate base.
    b. Driveways and road and driveway structures shall be designed and maintained to support at least 40,000 pounds.

53. Bridges: Ensure Bridges conforms to the Fire Safe Regulations; Weight limitations and Clearance.

    § 1273.07. Road and Driveway Structures
    a. Appropriate signing, including but not limited to weight or vertical clearance limitations, one-way road or single traffic lane conditions, shall reflect the capability of each bridge.
    b. Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with the American Association of State and Highway Transportation Officials Standard Specifications for Highway

Bridges, 17th Edition, published 2002 (known as AASHTO HB-17), hereby incorporated by reference. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of fire apparatus. Vehicle load limits shall be posted at both entrances to bridges when required by the local authority having jurisdiction.

c. Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for such use, barriers, or signs, or both, as approved by the local authority having jurisdiction, shall be installed and maintained.
d. A bridge with only one traffic lane may be authorized by the local jurisdiction; however, it shall provide for unobstructed visibility from one end to the other and turnouts at both ends.

54. Turnarounds: Driveway appears to be over 1 mile long and would require 2 additional turnarounds per Fire Safe Regulations.

§ 1273.05. Turnarounds
(b) The minimum turning radius for a turnaround shall be forty (40) feet, not including parking, in accordance with the figures in 14 CCR §§ 1273.05(e) and 1273.05(f). If a hammerhead/T is used instead, the top of the "T" shall be a minimum of sixty (60) feet in length.
(d) A turnaround shall be provided on driveways over 300 feet in length and shall be within fifty (50) feet of the building.
(d) Each dead-end road shall have a turnaround constructed at its terminus. Where parcels are zoned five (5) acres or larger, turnarounds shall be provided at a maximum of 1,320 foot intervals.

55. Defensible Space: Maintain defensible space specifications described in Public Resource Code 4291

§ 1276.01. Setback for Structure Defensible Space.
(c) Structures constructed in the SRA are required to comply with the defensible space regulations in Title 14. Natural Resources Division 1.5. Department of Forestry and Fire Protection Chapter 7. Fire Protection Subchapter 3. Fire Hazard.

Geology

Contact Jim Baker at (408)-299 5774 or Jim.baker@pln.sccgov.org for information regarding the following items.

56. Earth Systems' "Landslide Compilation" report (dated 4-13-2020) includes detailed mapping of landslides where grading improvements were done and recommends that the Pond 3 embankment be removed because of the erosion and instability caused by the outlet. In addition, the County geologist cannot support legalizing Pond 1 and 2 without additional site-specific geotechnical evaluations which would include recommendations for long-term stability. Since the landowner wishes to keep Pond 1, Pond 2, and Pond 3, additional geotechnical evaluation is required to formulate appropriate mitigation measures for Pond 1, 2, and 3.

Prior to resubmittal, please feel free to contact me to schedule an appointment so we can meet and discuss my comments regarding the project.

Please make sure the requested changes are made for the revised plan sets and documents that are needed for the resubmittal. **Resubmittals are only accepted by appointment with the assigned project planner.** If the requested information is not submitted within **180 days**, you will be required to pay a fee of 10% of the application fee at the time the information is submitted. All requested information must be submitted no later than **one (1) year** from the date of this letter. PARTIAL RESUBMITTALS WILL NOT BE PROCESSED. Fees required at the time of resubmittal will be those in effect at that time.

Please note that the Grading Abatement Application have been charged a minimum fee and will be charged additional fees to continue processing when the initial payment is exhausted.

In submitting this land use application, the owner/applicant included an initial application fee. Application fees are categorized as "fixed fees" and "billable fees", based on the particular application types. "Fixed fee" applications do not require any additional fees to continue processing. However, when funds associated with a "billable fee" application have been spent, an additional deposit will be required to continue processing the application.

If you have questions regarding the application, please contact me at (408) 299-5784 or xue.ling@pln.sccgov.org.

Warm regards,

Xue Ling
Associate Planner

cc:
Darrell Wong, LDE
Darrin Lee, DEH
Alex Golf, FMO
Colleen Tsuchimoto, PLN
Joanna Wilk, PLN
Kristin Garrison, CDFW
Mark Cassady, Waterboards
Carlos Alcantar, CalFire

County of Santa Clara

Department of Planning and Development
Planning Office

County Government Center, East Wing, 7th Floor
70 West Hedding Street
San Jose, California 95110-1705
(408) 299-5770 FAX (408) 288-9198
www.sccplanning.org

October 26, 2021

Amanda Musy-Verdel
7651 Eigleberry Street
Gilroy, CA 95020

FILE NUMBER: PLN20-139
SUBJECT: Additional Information / Issues of Concerns for Grading Abatement Application
SITE LOCATION: 0 Pacheco Pass, Hollister (APN: 898-19-003, -005, -043)
DATE RECEIVED: August 26, 2020

Dear Ms. Musy-Verdel,

Staff has reviewed the application, resubmitted on September 14, 2021 and would like to provide staff's assessment of the proposed design with respect to Grading Findings, Building Site Approval on Slope 30% or Greater, and Guidelines for Grading and Hillside Development. The letter also includes additional information and concerns from staff who are responsible for HCP, Land Development Engineering, and Environmental Health review.

The information in this section is/are not incomplete item(s) and are not required to deem the application complete for processing. The information in this section is informational only and can be discussed further if desired with County Staff.

1. Development is required to substantially meet the intent of the Grading Findings per County Grading Ordinance.

   Grading Findings
   (a) *The amount, design, location, and the nature of any proposed grading is necessary to establish or maintain a use presently permitted by law on the property.*
   (b) *The grading will not endanger public and/or private property, endanger public health and safety, will not result in excessive deposition of debris or soil sediments on any public right-of-way, or impair any spring or existing watercourse.*
   (c) *Grading will minimize impacts to the natural landscape, scenic, biological and aquatic resources, and minimize erosion impacts.*
   (d) *For grading associated with a new building or development site, the subject site shall be one that minimizes grading in comparison with other available development sites, taking into consideration other development constraints and regulations applicable to the project.*

(e) *Grading and associated improvements will conform with the natural terrain and existing topography of the site as much as possible, and should not create a significant visual scar.*
(f) *Grading conforms with any applicable general plan or specific plan policies; and*
(g) *Grading substantially conforms with the adopted "Guidelines for Grading and Hillside Development" and other applicable guidelines adopted by the County.*

Please note staff will consider the proposed restoration, legalization, and newly proposed grading in consistency with the grading findings, taking into other constraints and comments made by other review agencies.

Alternative Site Analyses

2. Additional documents are requested for staff to verify the lot legality of separate APNs (see Attachment A). If multiple APNs are determined to be one (1) legal parcel, conceptual alternative site analyses and additional studies might be required.

HCP Agency Review

3. The subject project is routed to HCP Agency for review. Staff will forward HCP agency's comments when available.

4. The applicant proposed a creek restoration plan by creating flood basins with additional cut to accommodate overflow. Although the proposed creek restoration deviates from the pre-violation condition, the submitted Design Basis Report concludes that "*more frequently inundated floodplain surface along both banks allow recruitment of SAW (Sycamore Alluvial Wildlife) species.*" The submitted biological report did not evaluate the biological benefit of the proposed scheme. Staff recommends providing biological evaluation of the proposed scheme, taking into consideration of the proposed tree replacement in this area (also see Comment #5).

Tree Replacement

5. The biological report identifies 39 trees being removed when the grading violation occurred. Staff recommends providing a tree replacement plan as a CEQA mitigation measure to restore the lost habitats. The project biologist shall review the plan and provide an assessment to evaluate whether the restoration plan and tree replacement would be sufficient to mitigate the environmental impact to less than significant level. The replacement trees shall be like-to-like, following the replacement ratios identified in the County Tree Protection Guildlines as below:

   For the removal of one small tree (5- 18 inches):
   (3) 15 gallon trees, or (2) 24-inch box trees.
   For the removal of one medium tree (18 – 24 inches):
   (4) 15 gallon trees or (3) 24-inch box trees.
   For the removal of a tree larger than 24 inches
   (5) 15 gallon trees or (4) 24-inch box trees.

Compliance Agreement

6. Section C1-71 of the County Ordinance Code requires property owners with code violations to enter into a Compliance Agreement before the issuance/approval of *any* permits under Division C, including land use approvals, building permits, grading permits, or revisions/modification of these permit types. The language of Ordinance Code Section C1-71 is below in *italics*:

   > *"**Violations or conflicts of laws.** – No permit required by this title shall be issued to any applicant, and no final inspection shall be made in connection with any premises or portion thereof upon which there exists a conflict with any County ordinance or state law.*
   >
   > *Permits may be issued to applicants in connection with any premises or portion thereof on which there exists a conflict with any County Ordinance or state law if the applicant has executed a compliance agreement and is in the process of completing or has completed the repairs, construction, or reconstruction described in the compliance agreement."*

   A Compliance Agreement is an agreement between a property owner and the County outlining the required process and steps to abate a code violation.

Santa Clara Valley Habitat Plan Review

Contact Colleen Tsuchimoto at (408) 299-5797 or colleen.tsuchimoto@pln.sccgov.org regarding the following comments:

1. The subject property is located in the Santa Clara Valley Habitat Plan area and the Private Development Area is designed Area 1: Private Development Covered. According to the submitted biological report, land cover appears to include Blue Oak Woodland, California Annual Grassland, Coast Live Oak Forest and Woodland, Developed/Ruderal, Diablan Sage Scrub, Freshwater Wetland, Mixed Oak Woodland and Forest, Pond, Sycamore Alluvial Woodland and Valley Oak Woodland.

2. Wildlife and Plant surveys for grassland species, riparian species and serpentine species are required. The site is located in CA Red Legged Frog Critical Habitat of US Fish and Wildlife Service, and CA Natural Diversity Database shows recently sightings of CA Tiger Salamander, CA Red Legged Frog and CA Foothill yellow legged frog on the subject property and adjacent properties. Burrowing Owl and a number of other species have been sighted on the property.
   Note: Habitat Plan coverage will be required. Any future development that affects any wildlife and/or plant species covered by the Habitat Plan, or any unmapped burrowing owl occupied nesting habitat, riparian, stream, pond, wetland, oak woodland, and serpentine habit requires coverage under the Habitat Plan. See Fees & Conditions Worksheet and Fee Schedule for reference.
   HCP documents including the HCP screening form, Habitat Plan Application, and Fees information are at the below weblink:
   https://scv-habitatagency.org/250/Private-Applicant

Land Development Enginneering
Contact Darrell Wong at (408) 299-5735 or darrell.wong@pln.sccgov.org for information regarding the following items.

3. All cut and fill slopes greater than 30' in vertical height shall include a 6-foot intermediate bench per the requirements of the County Ordinance Code Section C12-553.

4. Please provide a justification for the additional grading creating the hay storage area. There appear to be ample areas around the property that could be required for hay storage that would not require additional grading.

5. Justify the need for the asphalt grindings placement along the ranch roads in general. There is a large placement of grindings to expand the ranch road just before reaching the secondary dwelling unit proposed to be legalized.

6. Please provide a justification for the additive grading in the area of the turnaround at the front corral.

7. Demonstrate that the proposed replacement bridge soffit provides a minimum of two feet of free board above the base flood elevation. Show the creek crossing and the bridge on the driveway profile on Sheet 15. The bottom(soffit) of the bridge should be two feet above the Base flood elevation of 335.3' as shown on sheet R6. The elevation of the bridge needs to be raised which will affect the final grading. The current bridge surface appears to be just above 337, but that will be too low to have a soffit elevation of 337+.

8. Please demonstrate why the driveway must remain so wide and how the amount of grading for the development is the minimum necessary. If widened areas to provide for passing of farm vehicles are required per your previous responses, provide a justification why utilizing fire truck turnouts for passing will not be sufficient and why a fully widened driveway is required for the extent of the access. If this can't be demonstrated, the width of the driveway must be reduced and the grading for the driveway restored/reduced to match that of the SD5 standard.

9. Show how the impervious development as a result of the development on sheet 4 will be detained and treated as necessary.

Environmental Health
Contact Darrin Lee at (408) 299-5746 or darrin.lee@cep.sccgov.org for information regarding the following items:

10. If the intent is to legalize the unpermitted onsite wastewater treatment system currently serving the main dwelling, provide a detailed grading plan that shows the septic tank and dispersal field with no more than 1 foot of cover fill (above the top of the dispersal field) and the minimum dispersal field/trench depth requirements within native soil will be maintained.

11. Alternatively, if the existing onsite wastewater treatment system (OWTS) serving the main dwelling is to be abandoned, show/provide 'new' proposed area for OWTS. OWTS dispersal field cannot be installed within fill material.

Staff recommends a virtual appointment to discuss the above-mentioned issues. Please call me at (408) 299-5784 or email me for the appointment.

Sincerely,

Xue Ling
Associate Planner

Cc: Leza Mikhail, Interim Planning Manager and Zoning Administrator

Appendix I

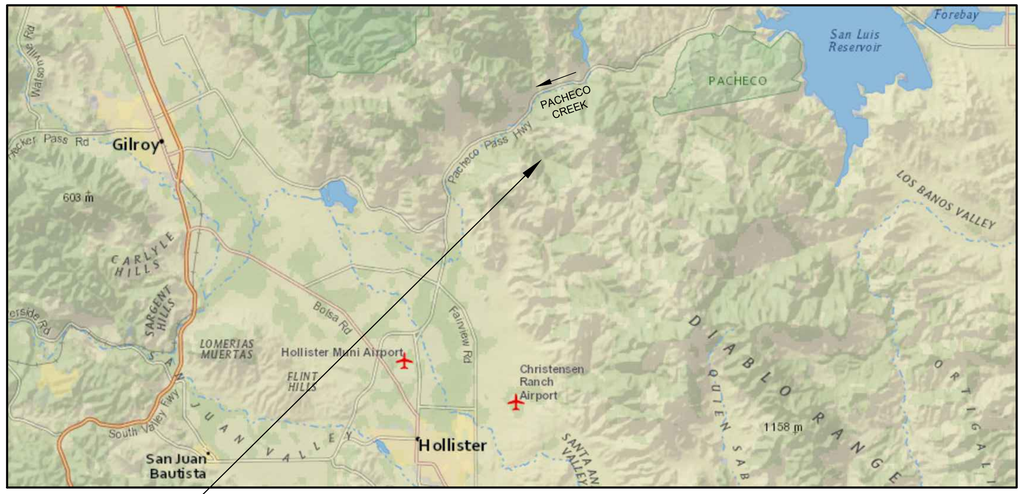
Grading Plans - Walls Land + Water (Dated 6/2/2022)

BOURDET RANCH GRADING VIOLATION ABATEMENT PROJECT

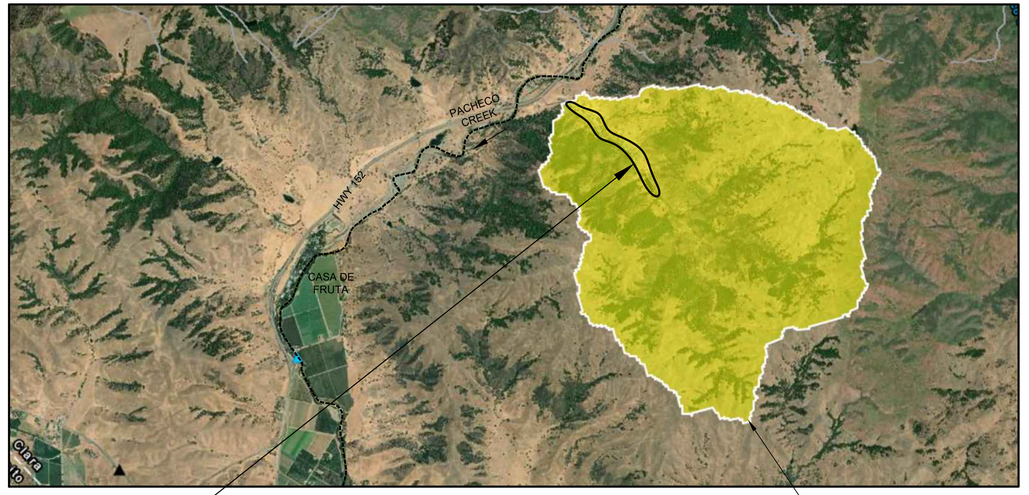
SANTA CLARA COUNTY PLN20-139

HARPER CANYON CREEK RESTORATION AND RESERVOIR SPILLWAY CHANNEL EROSION PROTECTION

30% DESIGN PLANS



REGIONAL MAP
N.T.S. (USGS STREAMSTATS)



VICINITY MAP
N.T.S. (USGS STREAMSTATS)

GENERAL NOTES

1. TOPOGRAPHIC MAPPING (AERIAL PHOTOGRAMMETRY) WAS PERFORMED BY:
   TOWILL
   2300 CLAYTON ROAD, SUITE 1200
   CONCORD, CA 94520
   PHOTOGRAPHY DATE; JANUARY 29, 2020.
2. SUPPLEMENTAL TOPOGRAPHIC MAPPING WAS PERFORMED BY:
   GEOMORPH DESIGN
   2100 FOURTH STREET, NO. 154
   SAN RAFAEL, CA 94901
   SURVEY DATE; APRIL 8, 2021.
3. ELEVATION DATUM: NAVD88. GEOMORPH DESIGN TIED INTO NGS AA1864 USING THE LEICA GEOSYSTEMS SMARTNET GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS).
4. BASIS OF BEARINGS: NAD83 CALIFORNIA STATE PLANE, ZONE 3. GEOMORPH DESIGN TIED INTO TOWILL'S CONTROL POINT 1108 (FOUND MONUMENT) USING THE LEICA GEOSYSTEMS SMARTNET GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS) NETWORK.
5. CONTOUR INTERVAL IS ONE FOOT. ELEVATIONS AND DISTANCES SHOWN ARE IN DECIMAL FEET.
6. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE 2018 EDITION OF THE STATE OF CALIFORNIA STANDARD SPECIFICATIONS, ISSUED BY THE DEPARTMENT OF TRANSPORTATION (HEREAFTER REFERRED TO AS "STANDARD SPECIFICATIONS").
7. THESE PLANS ARE DEVELOPED TO THE PRELIMINARY DESIGN LEVEL. IF REQUESTED BY OWNER AND/OR AGENCY CONTACTS, REVISIONS MAY BE MADE DURING FINAL PERMITTING AND CONSTRUCTION MANAGEMENT PHASE ACCORDING TO AGENCY SUGGESTIONS AND CONTRACTOR PREFERENCES, SOURCE MATERIAL INFORMATION, ETC., AND DOCUMENTED BY ENGINEER IN CONSTRUCTION PHASE AND CERTIFIED AS-BUILT UPDATES.
8. OWNER:
   LACY BOURDET
   PO BOX 1378
   HOLLISTER, CA 95024
9. AGENCY CONTACTS:
   COUNTY OF SANTA CLARA DEPT OF PLANNING AND DEVELOPMENT: DARRELL WONG, P.E. DARRELL.WONG@PLN.SCCGOV.ORG, (408) 299-5735
   CALIFORNIA DEPT OF FISH AND WILDLIFE: KRISTIN GARRISON KRISTIN.GARRISON@WILDLIFE.CA.GOV
   CENTRAL COAST REGIONAL WATER QUALITY CONTROL BOARD: MARK CASSADY, MARK.CASSADY@WATERBOARDS.CA.GOV
   UNITED STATES ARMY CORPS OF ENGINEERS: GREGORY BROWN, GREGORY.G.BROWN@USACE.ARMY.MIL
10. DESIGN CONSULTANTS:
    ENGINEER: MATT SMELTZER, P.E., GEOMORPHDESIGN, 510-219-1064, FLUVIALGEOMORPH@GMAIL.COM
    BRIAN SHEDDEN, P.E., SHEDDEN ENGINEERING & SURVEYING, INC., 831-325-2692, SHEDDEN.ENGINEERING@GMAIL.COM
    SCOTT WALLS, M.L.A., WALLS LAND + WATER, LLC., 831-246-1718, SCOTT@WALLSLANDWATER.COM
    GUOYUAN LI, PH.D., P.E., 415-322-9826 GUOYUANLI@GMAIL.COM

ABBREVIATIONS

AVG.	AVERAGE
BLDG	BUILDING
CC	CONCRETE
CLSTR	CLUSTER
CY	CUBIC YARDS
DBL	DOUBLE
DIA.	DIAMETER
E	EXISTING
EG	EXISTING GROUND
ELEV.	ELEVATION
EP	EDGE OF PAVEMENT
ETW	EDGE OF TRAVELED WAY
DI	DRAINAGE INLET
FG	FINISHED GRADE
FT	FEET
IR	IRRIGATION
INV	INVERT
MH	MANHOLE
N	NEW
NIC	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
PP	PLASTIC PIPE
RC	RELATIVE COMPACTION
RSP	ROCK SLOPE PROTECTION
SDI	STORM DRAIN INLET
SPK	SPIKE
SF	SQUARE FOOT
TBD	TO BE DETERMINED
TOW	TOP OF WALL
TRPL	TRIPLE
TYP	TYPICAL
UNK	UNKNOWN
UTIL	UTILITY
VLT	VAULT
VLV	VALVE
WSE	WATER SURFACE ELEVATION
XS	CROSS SECTION
YR	YEAR

EARTHWORK NOTES

1. GRADING SUMMARY:

ESTIMATED EARTH QUANTITIES:

ESTIMATED EARTH QUANITITIES			
	CUT (CY)	FILL (CY)	NET (CY)
RESTORATION REACH	10,569	601	9,968
FORD CROSSING	433	2	431
SPILLWAY CHANNEL	204	127	77
TOTAL	11,207	731	10,476 (OFF HAUL)

THE ABOVE QUANTITIES ARE APPROXIMATE IN-PLACE VOLUMES CALCULATED AS THE DIFFERENCE BETWEEN EXISTING GROUND AND THE PROPOSED FINISH GRADE, PREPARED FOR PERMITTING PURPOSES ONLY. EXISTING GROUND IS DEFINED BY THE TOPOGRAPHIC CONTOURS AND/OR SPOT ELEVATIONS ON THE PLAN. PROPOSED FINISH GRADE IS DEFINED AS THE DESIGN SURFACE ELEVATION OF WORK TO BE CONSTRUCTED. THE QUANTITIES HAVE NOT BEEN FACTORED TO INCLUDE ALLOWANCES FOR BULKING, CLEARING AND GRUBBING, SUBSIDENCE, SHRINKAGE, OVER EXCAVATION, AND RECOMPACTION, UNDERGROUND UTILITY AND SUBSTRUCTURE SPOILS AND CONSTRUCTION METHODS.

THE CONTRACTOR SHALL PERFORM AN INDEPENDENT EARTHWORK ESTIMATE FOR THE PURPOSE OF PREPARING BID PRICES FOR EARTHWORK. THE BID PRICE SHALL INCLUDE COSTS FOR ANY NECESSARY IMPORT AND PLACEMENT OF EARTH MATERIALS OR THE EXPORT AND PROPER DISPOSAL OF EXCESS OR UNSUITABLE EARTH MATERIALS.

SHEET INDEX

PROJECT DESCRIPTION

THE PROPOSED PRELIMINARY DESIGN PLANS WILL RESTORE THE HARPER CANYON STREAM CHANNEL TO AT OR NEAR PRE-VIOLATION CONDITIONS, ENHANCE THE FLOODPLAIN FOR RESTORATION OF SYCAMORE ALLUVIAL WOODLAND HABITAT, AND REDUCE FINE-SEDIMENT DELIVERY TO THE CREEK DUE TO BANK EROSION AND CHANNEL INCISION. THE PROJECT IS COMPOSED OF THREE DESIGN ELEMENTS:

CREEK AND FLOODPLAIN RESTORATION - AT THE GRADING VIOLATION SITE IN THE VICINITY OF THE SHOP BUILDINGS AND BRIDGE, RESTORE HARPER CANYON STREAM CHANNEL TO AN ALIGNMENT AND CHANNEL GEOMETRY SIMILAR TO ITS PRE-VIOLATION CONDITION, FLOODPLAIN ENHANCEMENT FOR RESTORATION OF SYCAMORE ALLUVIAL WOODLAND HABITAT, AND INSTALLATION OF A NEW CLEAR-CHANNEL-SPANNING REPLACEMENT BRIDGE. INSTALLATION OF ROCK-SLOPE PROTECTION ALONG LEFT BANK DOWNSTREAM OF BRIDGE WILL PROTECT THE EXISTING ROAD AND FACILITIES AND REDUCE FINE SEDIMENT DELIVERY DUE TO BANK EROSION.

FORD CROSSING IMPROVEMENT - AT THE EXISTING LOW-WATER "FORD" CROSSING, REMOVE THE CHANNEL-SPANNING CONCRETE BARRIER BLOCK GRADE CONTROL STRUCTURE AND RESTORE NATURAL CHANNEL BED AND BANK GEOMETRY AND PROVIDE FOR STABLE WET CROSSING AT NATURAL CHANNEL BED ELEVATION AND STABLE DRIVEWAY RAMPS BOTH SIDES.

RESERVOIR SPILLWAY CHANNEL BED AND BANK EROSION PROTECTION - DOWNSTREAM FROM THE BEDROCK RESERVOIR SPILLWAY, REMOVE THE CHANNEL-SPANNING CONCRETE BARRIER BLOCK GRADE CONTROL AND WEIR STRUCTURE AND REPLACE IT WITH AN ENGINEERED BOULDER WEIR. LAY BACK OVERSTEEPENED ERODIBLE SOIL SLOPES WITHIN THE FLOODPRONE AREA AND ELSEWHERE AND ARMOR ERODIBLE BANKS BELOW THE 100-YEAR WATER SURFACE ELEVATION WITH ROCK SLOPE PROTECTION.

SECTION AND DETAIL CONVENTION

SECTION OR DETAIL IDENTIFICATION (NUMBER OR LETTER)

A
C3

REFERENCE SHEET ON WHICH SECTION OR DETAIL IS SHOWN.

DRAFT - NOT FOR CONSTRUCTION

Revisions:

Harper Canyon
Pacheco Pass Highway
Santa Clara County, CA
A.P.N.s 898-19-005 & 043
Owner: Wyatt & Lacy Bourdet

COVER SHEET

HARPER CANYON

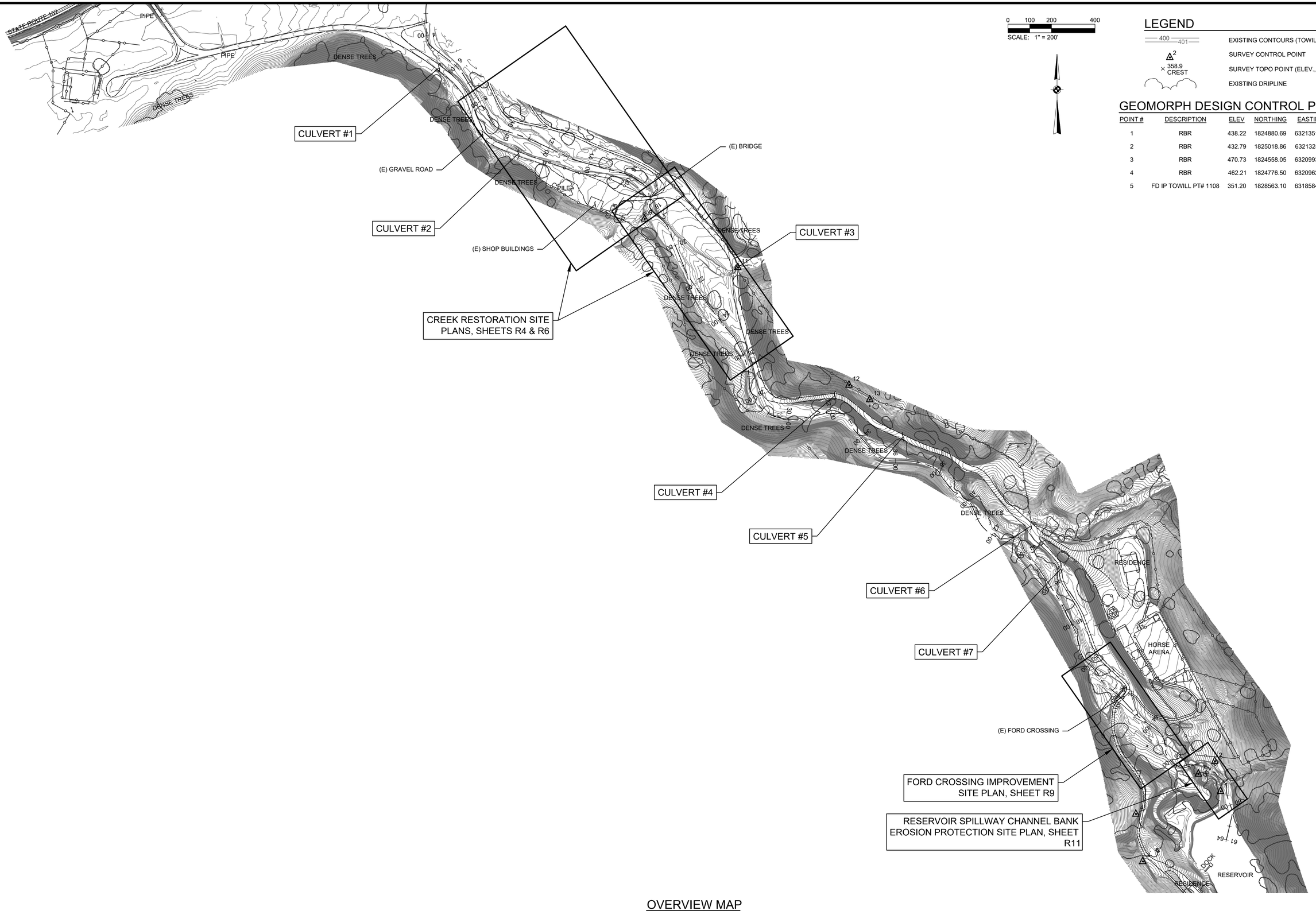
BOURDET RANCH GRADING VIOLATION ABATEMENT PROJECT

Geomorph DESIGN
2100 Fourth Street, No. 154
San Rafael, CA 94901
(510) 219-1064
www.geomorphdesign.com

geomorphDESIGN

Date: 2 JUN 2022
Design by: MS & SW
Drawn by: BRS
Checked by: MS & SW
Scale: AS SHOWN
30% DESIGN PLANS

R1



LEGEND

- 400 / 401 — EXISTING CONTOURS (TOWILL, JAN 2020)
- SURVEY CONTROL POINT
- 358.9 CREST — SURVEY TOPO POINT (ELEV., DESCR)
- EXISTING DRIPLINE

GEOMORPH DESIGN CONTROL POINTS

POINT #	DESCRIPTION	ELEV	NORTHING	EASTING
1	RBR	438.22	1824880.69	6321351.50
2	RBR	432.79	1825018.86	6321325.01
3	RBR	470.73	1824558.05	6320993.77
4	RBR	462.21	1824776.50	6320962.06
5	FD IP TOWILL PT# 1108	351.20	1828563.10	6318584.98

OVERVIEW MAP

SCALE: 1" = 200'

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OVERVIEW MAP

HARPER CANYON

BOURDET RANCH GRADING VIOLATION ABATEMENT PROJECT

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Drawn by: BRS
Checked by: MS & SW
Scale: 1" = 200'
30% DESIGN PLANS

R2

LEGEND

- EXISTING CONTOURS (TOWILL, JAN 2020) (400 / 401)
- EXISTING CONTOURS (COUNTY OF SANTA CLARA LIDAR, 2006) (400 / 401)
- EXISTING DRIPLINE (2020)
- EXISTING THALWEG (2006)
- EXISTING/PROPOSED THALWEG (2020) (23 / 00)
- EXISTING TOP OF BANK (2006)
- EXISTING TOP OF BANK (2020)
- PROPOSED TOP OF BANK

0 15 30 60

SCALE: 1" = 30'

NOTES:
1. EXISTING FEATURES SHOWN FROM 2020 TOWILL SURVEY.

(E) EDGE OF WATER (2020), TYP.
(E) GRAVEL DRIVEWAY (2020)
(E) THALWEG ALIGNMENT (2020)
(E) MAIN CHANNEL (2020)
FLOW
PROPOSED LIMITS OF GRADING
(E) CONCRETE BRIDGE (2020)
R5
R3
MATCHLINE
TRIBUTARY DRAINAGE
(E) GRAVEL DRIVEWAY (2020)
(E) CULVERT #2

CREEK RESTORATION SITE PLAN - 2006 VS 2020 CONTOURS

SCALE: 1" = 30'

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CREEK RESTORATION EXISTING SITE PLAN (1 OF 2)

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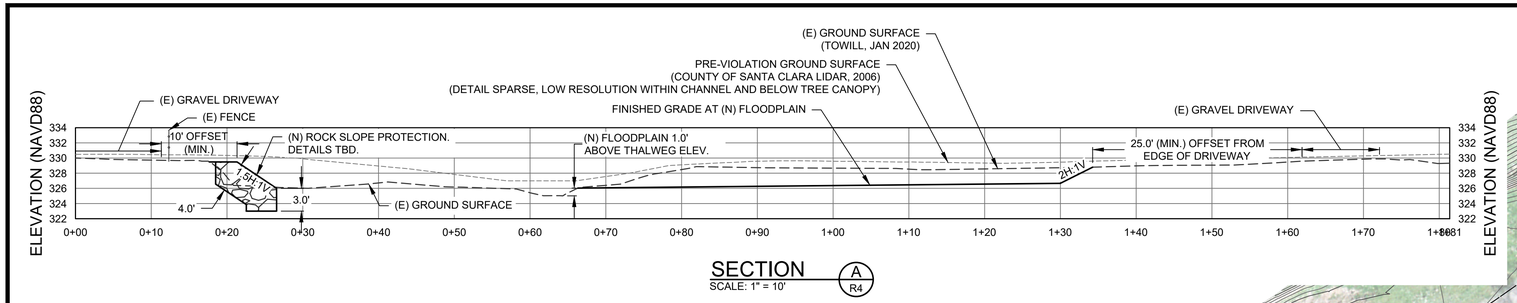
Scale: 1" = 30'
30% DESIGN PLANS

R3



SECTION A / R4
SCALE: 1" = 10'

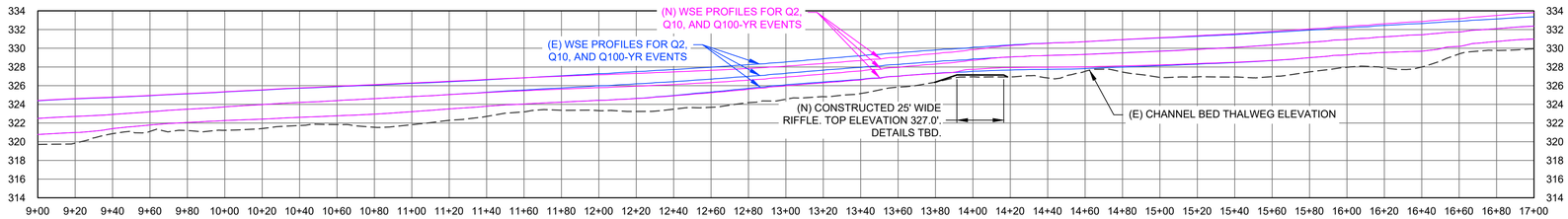
LEGEND

- EXISTING CONTOURS (TOWILL, JAN 2020)
- PROPOSED CONTOURS
- SURVEY CONTROL POINT
- SURVEY TOPO POINT (ELEV., DESCR)
- EXISTING DRIPLINE

0 15 30 60
SCALE: 1" = 30'

(E) THALWEG ALIGNMENT
(E) EDGE OF WATER, TYP.
(E) GRAVEL DRIVEWAY
25' OFFSET FROM EDGE OF DRIVEWAY
(N) LIMITS OF GRADING (APPROX. 17,812 SF)
(N) FLOODPLAIN (+1') (11,765 SF)
(E) MAIN CHANNEL
(N) CONSTRUCTED 25' WIDE RIFFLE. TOP ELEVATION 327.0'. DETAILS TBD.
(N) ROCK SLOPE PROTECTION. LENGTH = 230 LF. DETAILS TBD.
(E) CONCRETE BRIDGE (TO BE REPLACED. DESIGNED BY OTHERS)
ESTIMATED PRE-BRIDGE BANK ELEVATION CONTOURS
TRIBUTARY DRAINAGE
(E) GRAVEL DRIVEWAY
(E) CULVERT #2
FLOW
2H:1V
1.5H:1V
R6 / R4 MATCHLINE
A / R4
B / R6

CREEK RESTORATION SITE PLAN
SCALE: 1" = 30'



MAIN CHANNEL THALWEG PROFILE
SCALE: H: 1" = 40'; V: 1" = 8'

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CREEK RESTORATION SITE PLAN, SECTION, AND PROFILE (1 OF 2)

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Scale: 1" = 30'
30% DESIGN PLANS

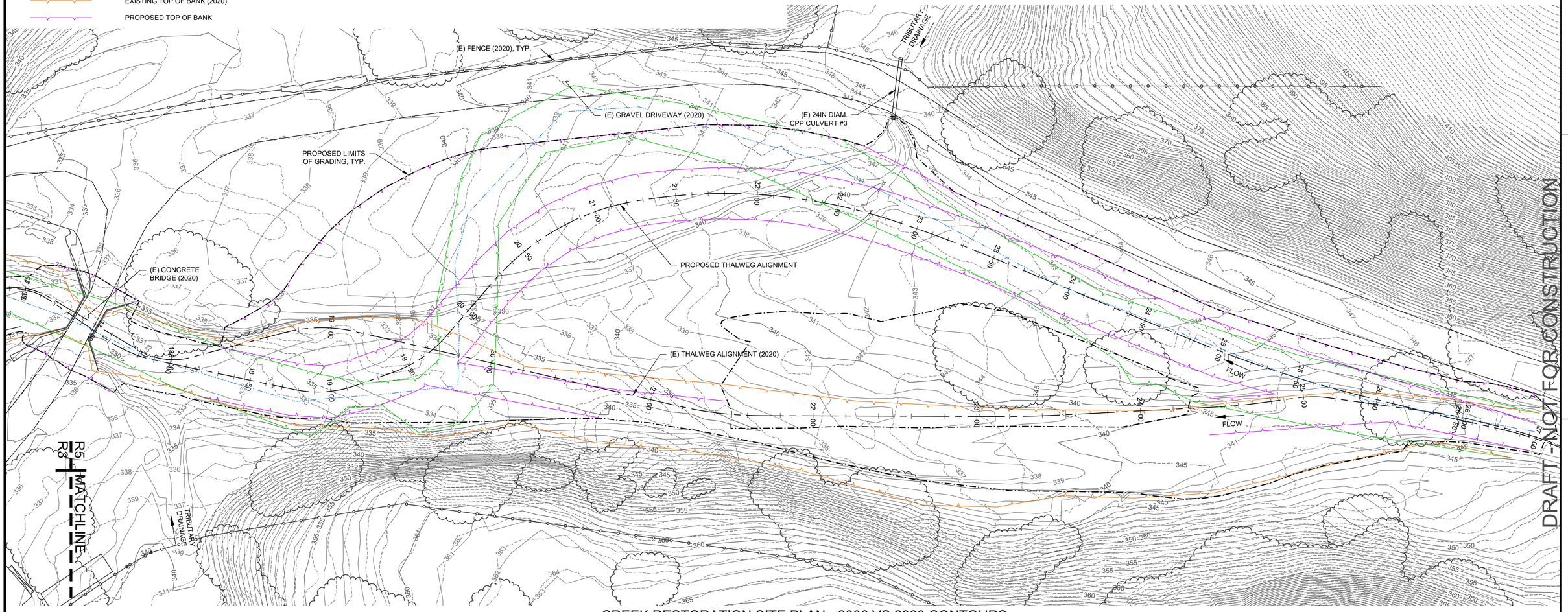
R4

LEGEND

- EXISTING CONTOURS (TOWILL, JAN 2020)
- EXISTING CONTOURS (COUNTY OF SANTA CLARA LIDAR, 2006)
- EXISTING DRIPLINE (2020)
- EXISTING THALWEG (2006)
- EXISTING/PROPOSED THALWEG (2020)
- EXISTING TOP OF BANK (2006)
- EXISTING TOP OF BANK (2020)
- PROPOSED TOP OF BANK

0 15 30 60
SCALE: 1" = 30'

NOTES:
1. EXISTING FEATURES SHOWN FROM 2020 TOWILL SURVEY.



CREEK RESTORATION SITE PLAN - 2006 VS 2020 CONTOURS
SCALE: 1" = 30'

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CREEK RESTORATION EXISTING SITE PLAN (2 OF 2)

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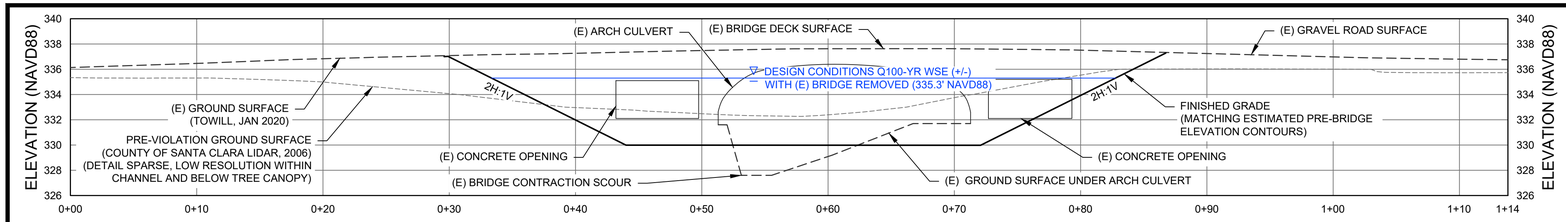
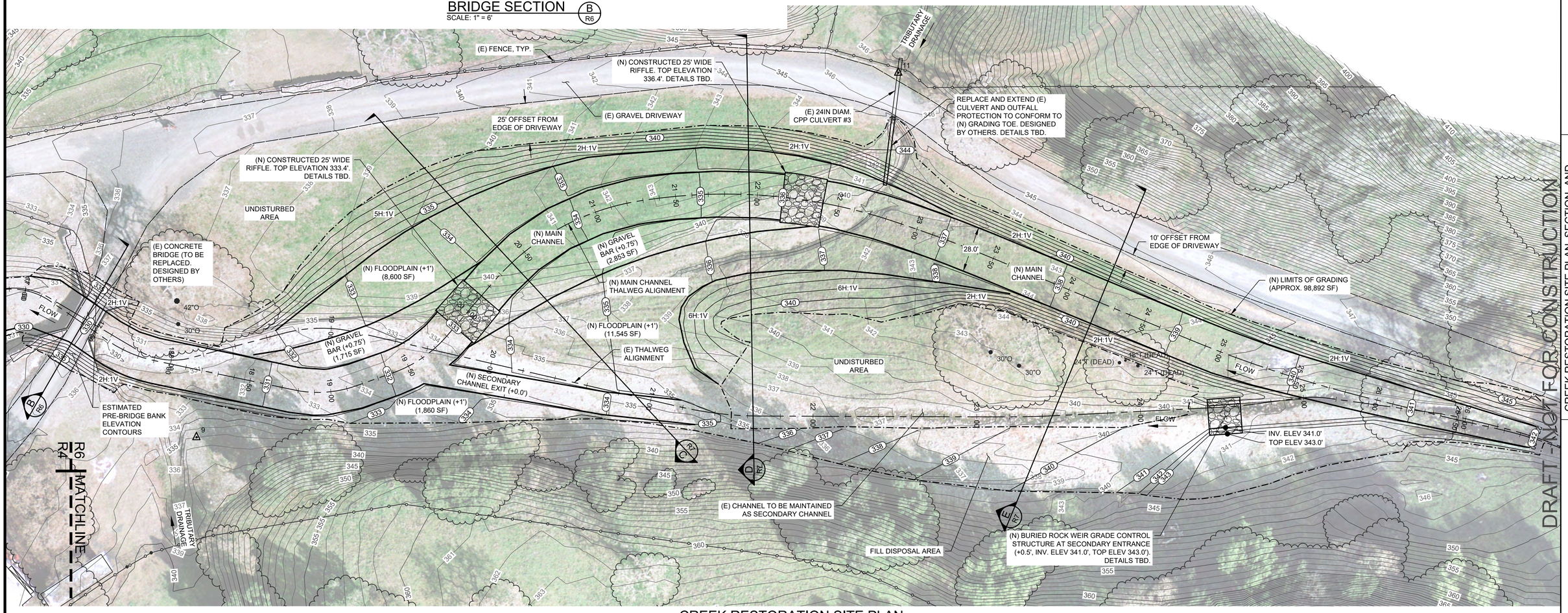
Scale: 1" = 30'
30% DESIGN PLANS

R5



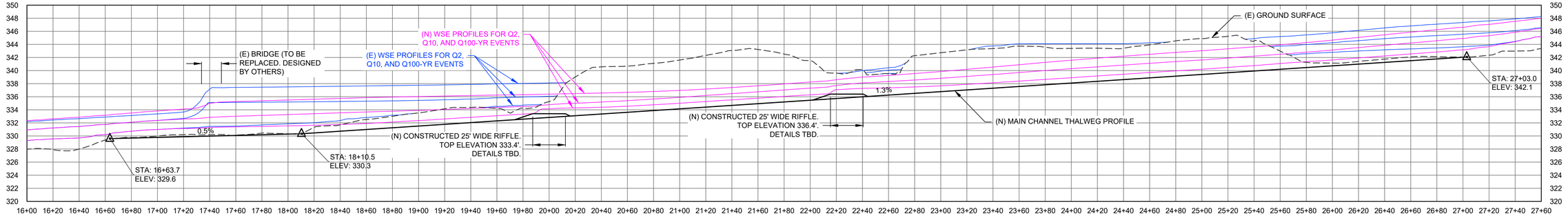
BRIDGE SECTION B / R6

SCALE: 1" = 6'



CREEK RESTORATION SITE PLAN

SCALE: 1" = 30'



MAIN CHANNEL THALWEG PROFILE

SCALE: H: 1" = 40'; V: 1" = 8'

SCALE: 1" = 30'

LEGEND

- EXISTING CONTOURS (TOWILL, JAN 2020)
- PROPOSED CONTOURS
- SURVEY CONTROL POINT
- SURVEY TOPO POINT (ELEV., DESCR)
- EXISTING DRIPLINE

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CREEK RESTORATION SITE PLAN, SECTION, AND PROFILE (2 OF 2)

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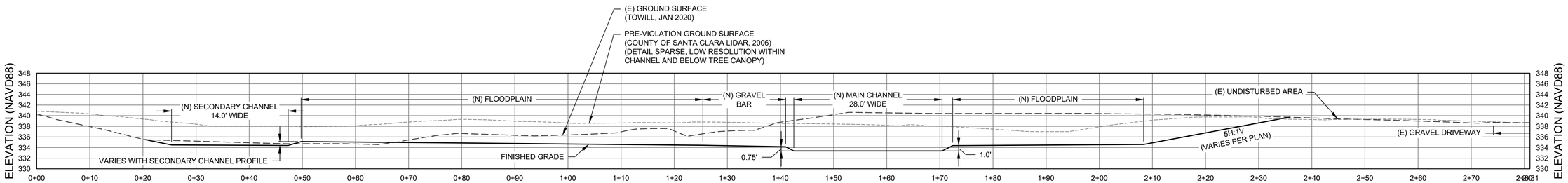
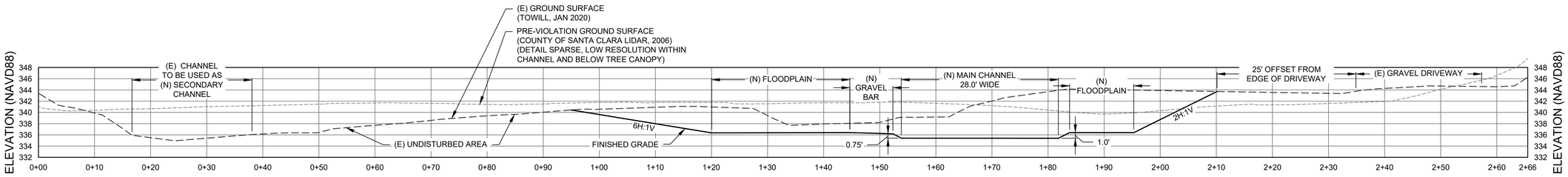
30% DESIGN PLANS

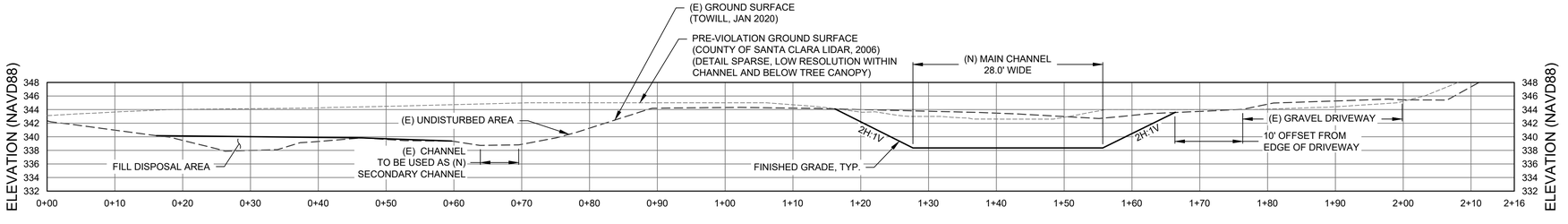
R6



SECTION
SCALE: 1" = 10'
C
R7



SECTION
SCALE: 1" = 10'
D
R7



SECTION
SCALE: 1" = 10'
E
R7

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CREEK RESTORATION SECTIONS

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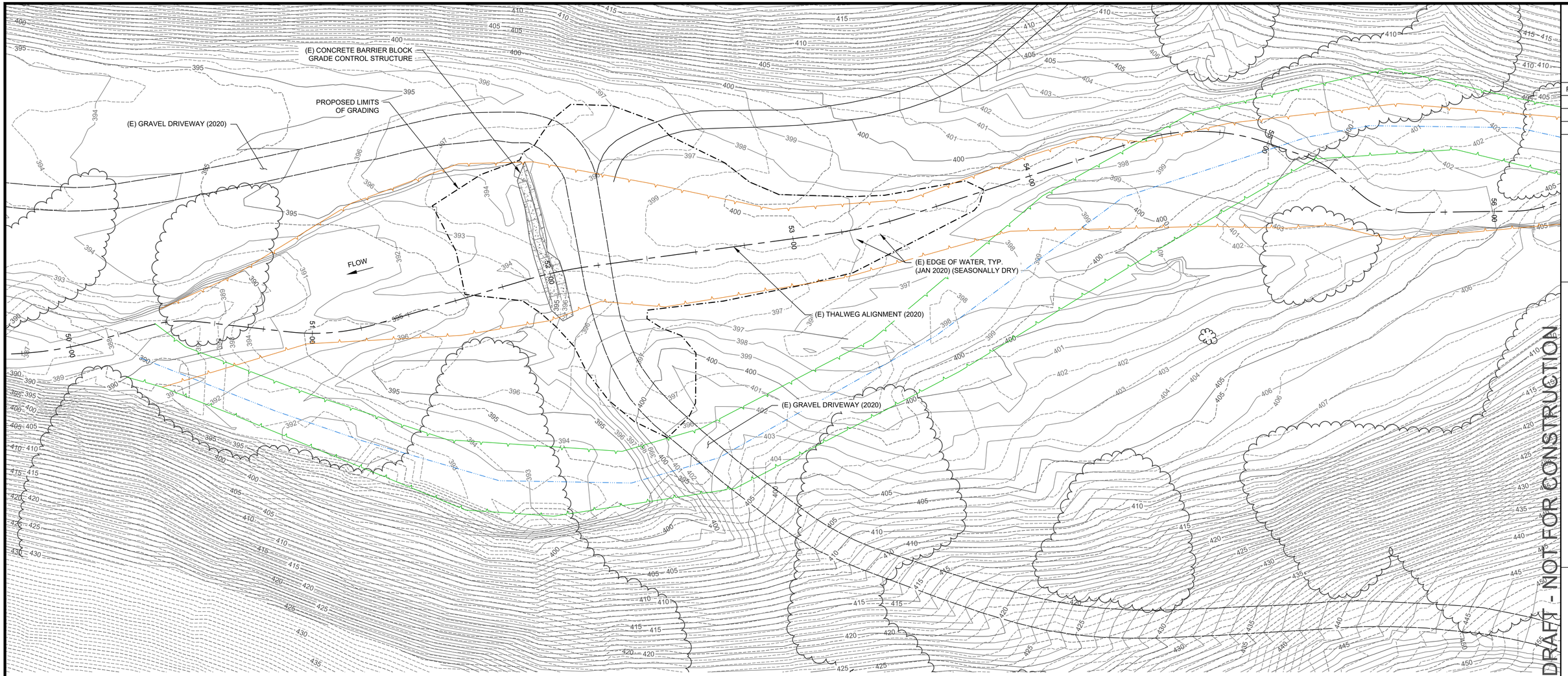
Drawn by:
BRS

Checked by:
MS & SW

Scale:
1" = 10'

30% DESIGN PLANS

R7



FORD CROSSING SITE PLAN - 2006 VS 2020 CONTOURS

SCALE: 1" = 20'

LEGEND

- EXISTING CONTOURS (TOWILL, JAN 2020)
- EXISTING CONTOURS (COUNTY OF SANTA CLARA LIDAR, 2006)
- EXISTING DRIPLINE (2020)
- EXISTING THALWEG (2006)
- EXISTING/PROPOSED THALWEG (2020)
- EXISTING TOP OF BANK (2006)
- EXISTING TOP OF BANK (2020)
- PROPOSED TOP OF BANK

0 10 20 40

SCALE: 1" = 20'

NOTES:
1. EXISTING FEATURES SHOWN FROM 2020 TOWILL SURVEY.

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FORD CROSSINGSITE EXISTING SITE PLAN

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Scale: 1" = 20'

30% DESIGN PLANS

R8

REMOVE (E) CONCRETE BARRIER BLOCK GRADE CONTROL STRUCTURE (447 SF)

LIMITS OF GRADING (APPROX. 12,775 SF)

DESIGN AND FIELD-FIT CHANNEL BED AND BANK GRADING TO AVOID AND MINIMIZE IMPACTS TO (E) RIPARIAN VEGETATION SURROUNDING AREA

(N) 10% MAX. SLOPED RAMP ROCK-REINFORCED BELOW ELEVATION 396' (330 SF)

(E) EDGE OF WATER, TYP. (JAN 2020) (SEASONALLY DRY)

BED ELEVATION PROFILE, THIS SHEET

REMOVE (E) LOW-WATER "FORD" CROSSING TO RESTORE NATURAL CREEK BED AND BANK ELEVATION CONTOURS

(N) NATURAL ROCK-REINFORCED CHANNEL LOW-WATER WET CROSSING (566 SF)

(N) 10% MAX. SLOPED RAMP ROCK-REINFORCED BELOW ELEVATION 397' (270 SF)

(E) GRAVEL DRIVEWAY

FLOW

R9 F

LEGEND

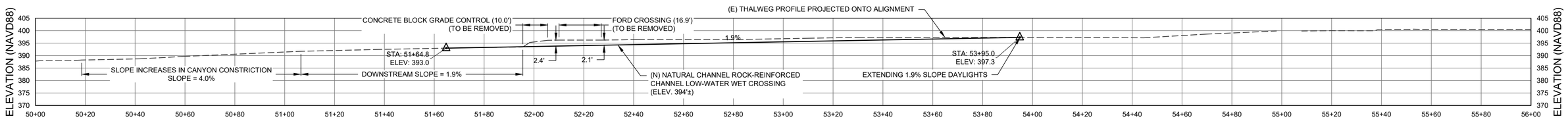
- EXISTING CONTOURS (TOWILL, JAN 2020)
- PROPOSED CONTOURS
- SURVEY CONTROL POINT
- SURVEY TOPO POINT (ELEV., DESCR)
- EXISTING DRIPLINE

0 10 20 40

SCALE: 1" = 20'

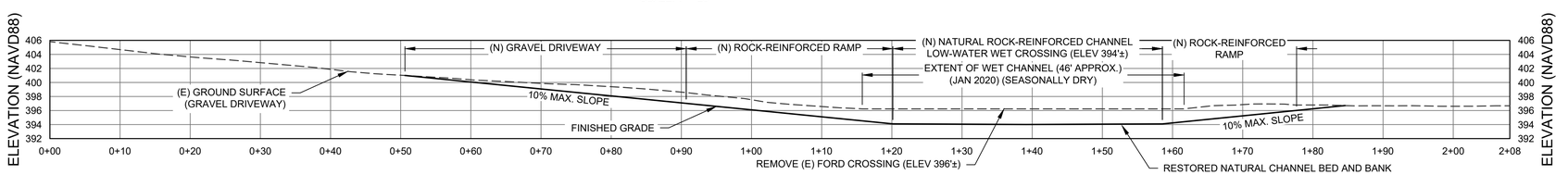
FORD CROSSING IMPROVEMENT SITE PLAN

SCALE: 1" = 20'



BED ELEVATION PROFILE

SCALE: 1" = 20'



FORD CROSSING SECTION

SCALE: 1" = 10'

F R9

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FORD CROSSING IMPROVEMENT SITE PLAN

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Checked by: MS & SW

Scale: 1" = 20', 1" = 10'

30% DESIGN PLANS

R9

(E) FENCE

(E) EXPOSED BEDROCK CHANNEL (2020)

(E) BOULDERS (2020)

(E) POOL (2020)

(E) POOL (2020)

(E) EDGE OF WATER (2020), TYP.

TRIBUTARY DRAINAGE

(E) CONCRETE BARRIER BLOCK WEIR STRUCTURE (2020)

(E) THALWEG ALIGNMENT (2020)

FLOW

PROPOSED LIMITS OF GRADING

432.8
CREST SPILLWAY

441.0
CREST DAM

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RESERVOIR SPILLWAY CHANNEL SITE PLAN - 2006 VS 2020 CONTOURS

SCALE: 1" = 10'

0 5 10 20

SCALE: 1" = 10'

LEGEND

- EXISTING CONTOURS (TOWILL, JAN 2020)
- EXISTING CONTOURS (COUNTY OF SANTA CLARA LIDAR, 2006)
- EXISTING DRIPLINE (2020)
- EXISTING THALWEG (2006)
- EXISTING/PROPOSED THALWEG (2020)
- EXISTING TOP OF BANK (2006)
- EXISTING TOP OF BANK (2020)
- PROPOSED TOP OF BANK

NOTES:

1. EXISTING FEATURES SHOWN FROM 2020 TOWILL SURVEY.
2. EXISTING TOP OF BANK FROM 2006 LOCATED OUTSIDE OF SHEET VIEW, WEST OF CURRENT LOCATION.

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RESERVOIR SPILLWAY CHANNEL EXISTING SITE PLAN

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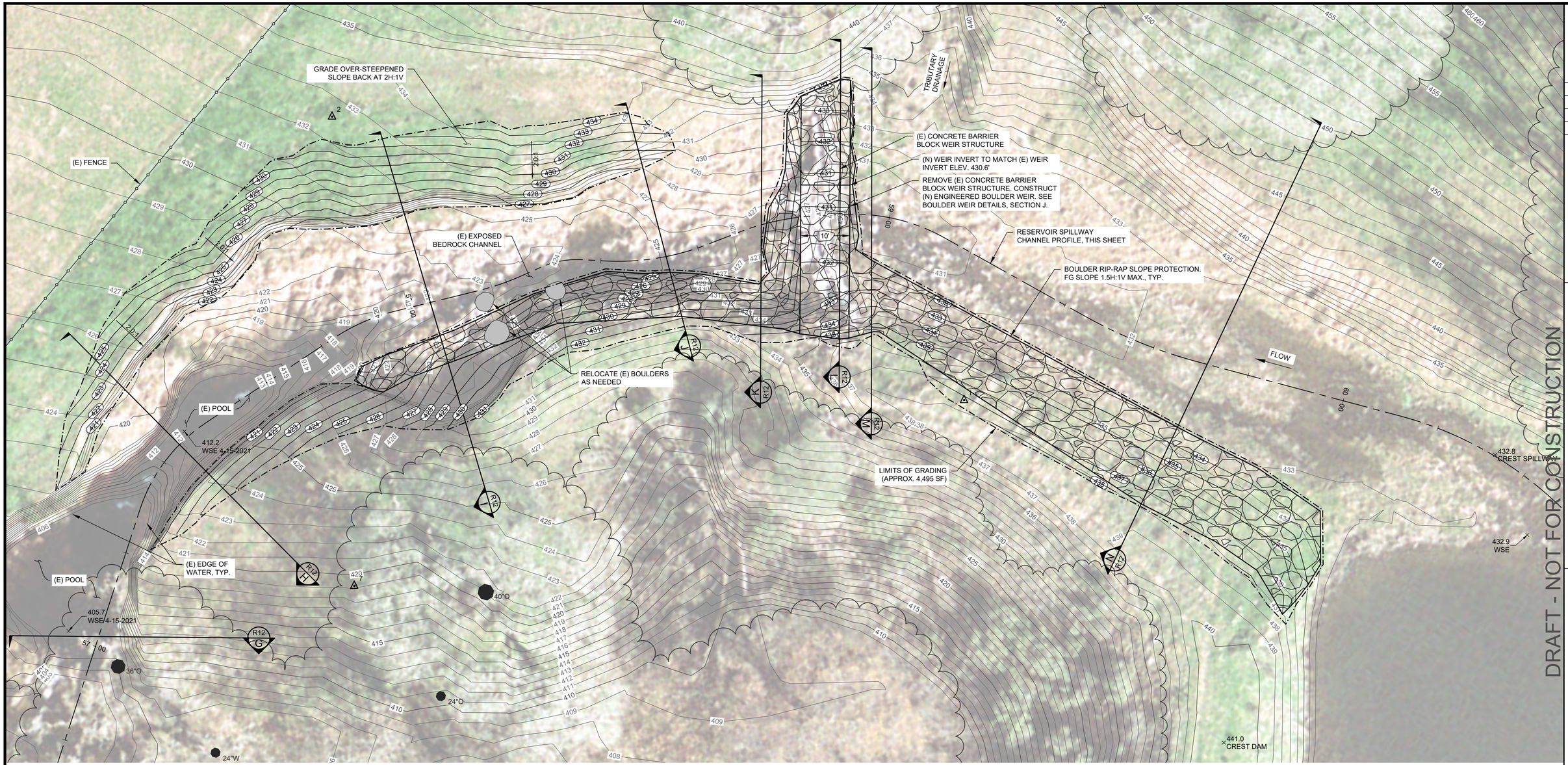
30% DESIGN PLANS

R10



RESERVOIR SPILLWAY CHANNEL BANK EROSION PROTECTION SITE PLAN

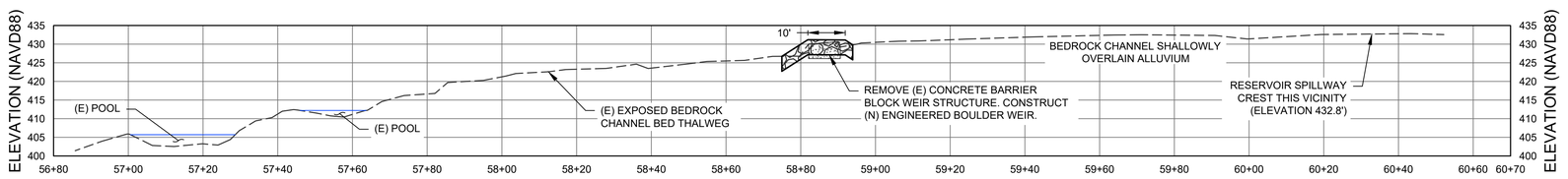
SCALE: 1" = 10'

0 5 10 20

SCALE: 1" = 10'

LEGEND

- EXISTING CONTOURS (TOWILL, JAN 2020)
- PROPOSED CONTOURS
- SURVEY CONTROL POINT
- SURVEY TOPO POINT (ELEV., DESCR)
- EXISTING DRIPLINE



RESERVOIR SPILLWAY CHANNEL PROFILE

SCALE: 1" = 20'

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RESERVOIR SPILLWAY CHANNEL BANK EROSION PROTECTION SITE PLAN

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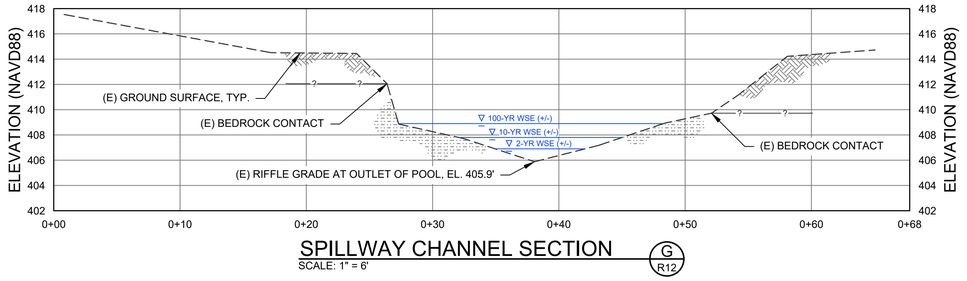
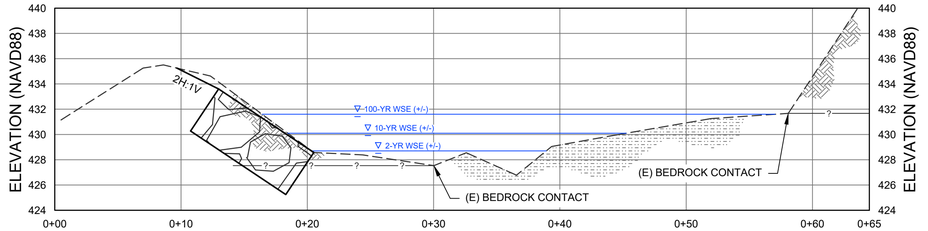
Scale: 1" = 10', 1" = 20'
30% DESIGN PLANS

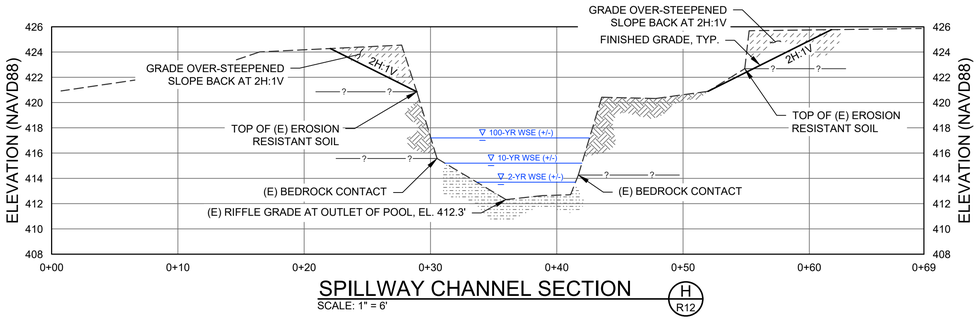
R11



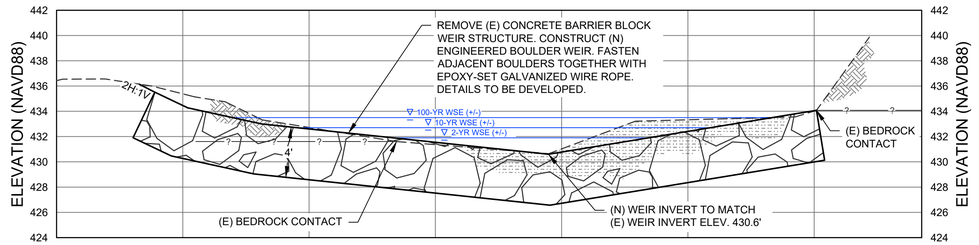
SPILLWAY CHANNEL SECTION (G R12)
SCALE: 1" = 6'



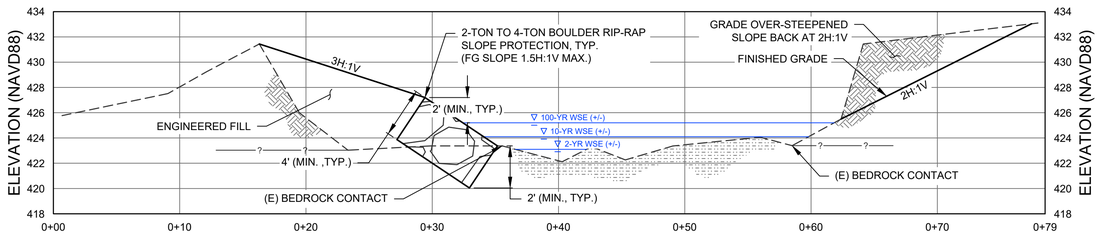
SPILLWAY CHANNEL SECTION (K R12)
SCALE: 1" = 6'



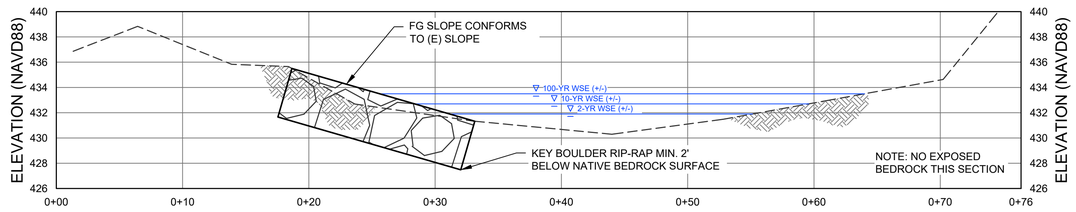
SPILLWAY CHANNEL SECTION (H R12)
SCALE: 1" = 6'



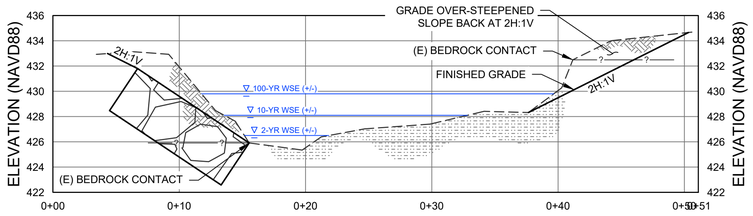
SPILLWAY CHANNEL SECTION (L R12)
SCALE: 1" = 6'



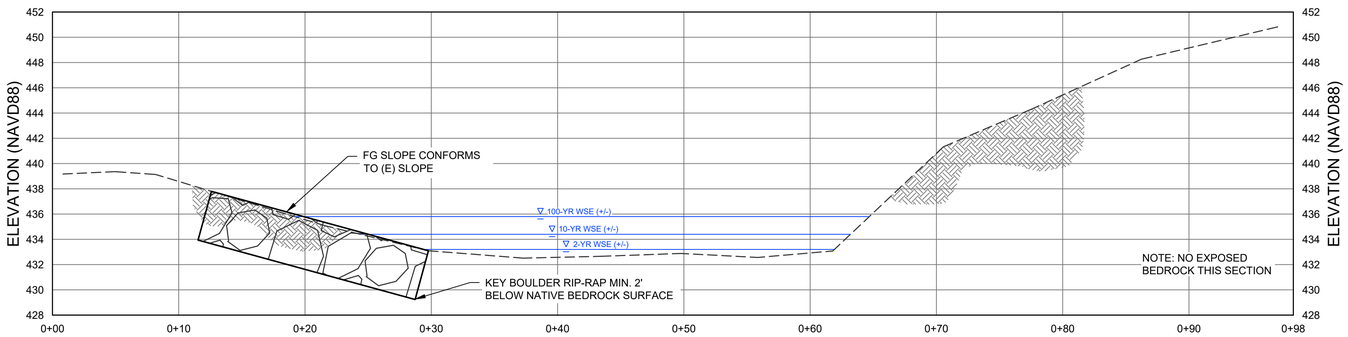
SPILLWAY CHANNEL SECTION (I R12)
SCALE: 1" = 6'



SPILLWAY CHANNEL SECTION (M R12)
SCALE: 1" = 6'



SPILLWAY CHANNEL SECTION (J R12)
SCALE: 1" = 6'



SPILLWAY CHANNEL SECTION (N R12)
SCALE: 1" = 6'

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RESERVOIR SPILLWAY CHANNEL CROSS SECTIONS

HARPER CANYON

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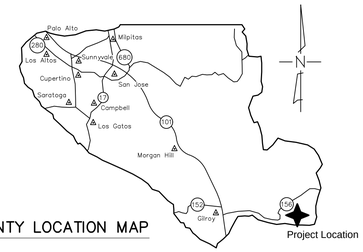
Checked by: MS & SW
Scale: 1" = 6'
30% DESIGN PLANS

R12

Appendix J

Grading Plans - Hanna-Brunetti, County File No. PLN20-139 (Dated 08/04/2022)



COUNTY OF SANTA CLARA

General Construction Specifications

GENERAL CONDITIONS

1. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE SOILS AND/OR GEOTECHNICAL REPORT PREPARED BY EARTH SYSTEMS PACIFIC FILE NO. 303659-001 AND DATED APRIL 13, 2020 THIS REPORT IS SUPPLEMENTED BY: 1) THESE PLANS AND SPECIFICATIONS, 2) THE COUNTY OF SANTA CLARA STANDARD DETAILS. 3) THE COUNTY OF SANTA CLARA STANDARD SPECS, 4) STATE OF CALIFORNIA STANDARD DETAILS, 5) STATE OF CALIFORNIA STANDARD SPECIFICATIONS. IN THE EVENT OF CONFLICT THE FORMER SHALL TAKE PRECEDENCE OVER THE LATTER. THE PERFORMANCE AND COMPLETION OF ALL WORK MUST BE TO THE SATISFACTION OF THE COUNTY.
2. DEVELOPER IS RESPONSIBLE FOR INSTALLATION OF THE IMPROVEMENTS SHOWN ON THESE PLANS AND HE OR HIS SUCCESSOR PROPERTY OWNERS ARE RESPONSIBLE FOR THEIR CONTINUED MAINTENANCE.
3. DEVELOPER SHALL BE RESPONSIBLE FOR CORRECTION OF ANY ERRORS OR OMISSIONS IN THESE PLANS. THE COUNTY SHALL BE AUTHORIZED TO REQUIRE DISCONTINUANCE OF ANY WORK AND SUCH CORRECTION AND MODIFICATION OF PLANS AS MAY BE NECESSARY TO COMPLY WITH COUNTY STANDARDS OR CONDITIONS OF DEVELOPMENT APPROVAL.
4. DEVELOPER SHALL OBTAIN ENCROACHMENT PERMITS FROM THE SANTA CLARA VALLEY WATER DISTRICT AND CALIFORNIA DEPARTMENT OF TRANSPORTATION WHERE NEEDED. COPIES OF THESE PERMITS SHALL BE KEPT AT THE JOB SITE FOR REVIEW BY THE COUNTY'S INSPECTOR.
5. DEVELOPER SHALL REMOVE OR TRIM ALL TREES TO PROVIDE AN UNOBSTRUCTED FIFTEEN (15) FOOT VERTICAL CLEARANCE FOR ROADWAY AREA.
6. THIS PLAN AUTHORIZES THE REMOVAL OF ONLY THOSE TREES WITH TRUNK DIAMETERS GREATER THAN 12 INCHES MEASURED 4.5 FEET ABOVE THE GROUND THAT ARE SHOWN TO BE REMOVED UNLESS AN AMENDED PLAN IS APPROVED OR A SEPARATE TREE REMOVAL PERMIT IS OBTAINED FROM THE PLANNING OFFICE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT REMOVAL OF ADDITIONAL TREES HAS BEEN PERMITTED.
7. DEVELOPER SHALL PROVIDE ADEQUATE DUST CONTROL AS REQUIRED BY THE COUNTY INSPECTOR.
8. ALL PERSONS MUST COMPLY WITH SECTION 4442 OF THE PUBLIC RESOURCES CODE AND SECTION 13005 OF THE HEALTH AND SAFETY CODE RELATING TO THE USE OF SPARK ARRESTERS.
9. UPON DISCOVERING OR UNEARTHING ANY BURIAL SITE AS EVIDENCED BY HUMAN SKELETAL REMAINS OR ARTIFACTS, THE PERSON MAKING SUCH DISCOVERY SHALL IMMEDIATELY NOTIFY THE COUNTY CORONER AT (408) 454-2520 AND LAND DEVELOPMENT ENGINEERING OFFICE AT (408) 299-5730. NO FURTHER DISTURBANCE OF THE SITE MAY BE MADE EXCEPT AS AUTHORIZED BY THE LAND DEVELOPMENT OFFICE IN ACCORD WITH PROVISIONS OF THIS ORDINANCE (COUNTY ORDINANCE CODE SECTION B6-18).
10. THESE PLANS ARE FOR THE WORK DESCRIBED IN THE SCOPE OF WORK ONLY. A SEPARATE PERMIT WILL BE REQUIRED FOR THE SEPTIC LINE CONSTRUCTION.
11. ANY DEVIATION FROM THESE APPROVED PLANS SHALL BE RE-APPROVED IN WRITING BY THE COUNTY ENGINEER PRIOR TO CONSTRUCTION.

CONSTRUCTION STAKING

1. THE DEVELOPER'S ENGINEER IS RESPONSIBLE FOR THE INITIAL PLACEMENT AND REPLACEMENT OF CONSTRUCTION GRADE STAKES. THE STAKES ARE TO BE ADEQUATELY IDENTIFIED, LOCATED, STABILIZED, ETC. FOR THE CONVENIENCE OF CONTRACTORS. LATERAL OFFSET OF STAKES SET FOR CURBS AND GUTTERS SHALL NOT EXCEED 2 1/2 FEET FROM BACK OF CURB.
2. ANY PROPERTY LINE STAKES OR ROAD MONUMENTS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY DEVELOPER'S ENGINEER AND LICENSED LAND SURVEYOR.
3. PROPERTY LINE STAKING MUST BE PERFORMED BY THE PROJECT ENGINEER OR LAND SURVEYOR TO ESTABLISH OR RE-ESTABLISH THE PROJECT BOUNDARY AND SHALL BE INSPECTED BY THE COUNTY INSPECTOR PRIOR TO THE BEGINNING OF THE WORK.
4. PROPER CONSTRUCTION STAKES SHALL BE SET IN THE FIELD BY THE PROJECT ENGINEER OR LAND SURVEYOR AND VERIFIED BY THE COUNTY INSPECTOR PRIOR TO THE COMMENCEMENT OF GRADING.
5. IN ACCORDANCE WITH THE CALIFORNIA PROFESSIONAL LAND SURVEYORS' ACT (BUSINESS AND PROFESSIONS CODE) CHAPTER 15 SECTIONS 8771 AND 8725.1, CALIFORNIA PENAL CODE 605, AND CALIFORNIA GOVERNMENT CODE 27581, ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES THAT WILL OR MAY DISTURB AN EXISTING ROADWAY/STREET MONUMENT, PROPERTY CORNER, OR ANY OTHER PERMANENT SURVEYED MONUMENT AND/OR AS SHOWN ON THIS TENTATIVE MAP SHALL ENSURE THAT A CORNER RECORD AND/OR RECORD OF SURVEY ARE FILED WITH THE OCUNTY SURVEYOR OFFICE PRIOR TO DISTURBING SAID MONUMENTS. ALL DISTURBED OR DESTROYED MONUMENTS SHALL BE RESET AND FILED IN COMPLIANCE WITH SECTION 8771.

CONSTRUCTION INSPECTION

1. CONTRACTOR SHALL NOTIFY PERMIT INSPECTION UNIT, SANTA CLARA COUNTY PRIOR TO COMMENCING WORK AND FOR FINAL INSPECTION OF WORK AND SITE.
2. THE COUNTY REQUIRES A MINIMUM OF 24 HOURS ADVANCE NOTICE FOR GENERAL INSPECTION, 48 HOURS FOR ASPHALT CONCRETE INSPECTION.
3. INSPECTION BY SANTA CLARA COUNTY SHALL BE LIMITED TO INSPECTION OF MATERIALS AND PROCESSES OF CONSTRUCTION TO OBSERVE THEIR COMPLIANCE WITH PLANS & SPECIFICATIONS BUT DOES NOT INCLUDE RESPONSIBILITY FOR THE SUPERINTENDENT OF CONSTRUCTION, SITE CONDITIONS, EQUIPMENT OR PERSONNEL. CONTRACTOR SHALL NOTIFY THE COUNTY LAND DEVELOPMENT INSPECTOR AT PHONE (408) 299-6868 AT LEAST 24 HOURS PRIOR TO COMMENCING WORK AND FOR FINAL INSPECTION OF WORK AND SITE.
4. DEVELOPER AND/OR HIS AUTHORIZED REPRESENTATIVE MUST SUBMIT WRITTEN REQUEST FOR FINAL INSPECTION AND ACCEPTANCE. SAID REQUEST SHALL BE DIRECTED TO THE INSPECTION OFFICE NOTED ON THE PERMIT FORM.
5. THE CONTRACTOR SHALL PROVIDE TO THE COUNTY CONSTRUCTION INSPECTOR WITH PAD ELEVATION AND LOCATION CERTIFICATES, PREPARED BY THE PROJECT ENGINEER OR LAND SURVEYOR, PRIOR COMMENCEMENT OF THE BUILDING FOUNDATION.

SITE PREPARATION (CLEARING AND GRUBBING)

1. EXISTING TREES AUTHORIZED FOR REMOVAL, ROOTS, AND FOREIGN MATERIAL IN AREAS TO BE IMPROVED WILL BE REMOVED TO AN AUTHORIZED DISPOSAL SITE AS FOLLOWS:

A) TO A MINIMUM DEPTH OF TWO FEET BELOW THE FINISHED GRADE OF PROPOSED ROADWAYS (EITHER PRIVATE OR TO BE DEDICATED TO PUBLIC USE)

B) FROM AREAS AFFECTED BY THE PROPOSED GRADING EXCEPT WHERE NOTED ON THE PLANS.

2. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO MOVE OR RELOCATE UTILITY POLES AND OTHER OBSTRUCTIONS IN THE WAY OF CONSTRUCTION.

UTILITY LOCATION, TRENCHING & BACKFILL

1. CONTRACTOR SHALL NOTIFY USA (UNDERGROUND SERVICE ALERT) AT 1-800-277-2600 A MINIMUM OF 24 HOURS BEFORE BEGINNING UNDERGROUND WORK FOR VERIFICATION OF THE LOCATION OF UNDERGROUND UTILITIES.
2. ACCURATE VERIFICATION AS TO SIZE, LOCATION, AND DEPTH OF EXISTING UNDERGROUND CONDUITS OR FACILITIES SHALL BE THE INDIVIDUAL CONTRACTORS RESPONSIBILITY. PLAN LOCATIONS ARE APPROXIMATE AND FOR GENERAL INFORMATION ONLY.
3. ALL UNDERGROUND INSTALLATIONS SHALL BE IN PLACE AND THE TRENCH BACKFILLED AND COMPACTED BEFORE PLACING AGGREGATE BASE MATERIAL OR SURFACE STRUCTURES. SURFACING MAY BE DONE IF THE UTILITY COMPANY CONCERNED INDICATES BY LETTER THAT IT WILL BORE. UNLESS SPECIFICALLY AUTHORIZED BY THE COUNTY, GAS AND WATER MAINS SHALL BE INSTALLED OUTSIDE THE PAVED AREAS.
4. TRENCH BACKFILL IN EXISTING PAVEMENT AREAS SHALL BE SAND MATERIAL IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE SPECIFICATIONS. THE STRUCTURAL SECTION FOR TRENCH REPLACEMENT SHALL CONSIST OF NOT LESS THAN 12 INCHES OF APPROVED AGGREGATE BASE MATERIAL COMPACTED TO A RELATIVE COMPACTION OF AT LEAST 95% AND 4 INCHES OF HOT ASPHALT CONCRETE PLACED IN TWO LIFTS. TRENCH RESTORATION FOR HIGHER TYPE PAVEMENTS SHALL BE MADE IN KIND OR AS DIRECTED BY THE COUNTY.
5. TRENCH BACKFILL IN NEW CONSTRUCTION AREAS SHALL BE SAND MATERIAL COMPACTED TO A RELATIVE COMPACTION OF AT LEAST 90%. THE REQUIREMENT FOR SELECT MATERIAL MAY BE WAIVED BY COUNTY IF THE NATIVE SOIL IS SUITABLE FOR USE AS TRENCH BACKFILL BUT THE COMPACTION REQUIREMENTS WILL NOT BE THEREBY WAIVED.
6. BACKFILL AND TRENCH RESTORATION REQUIREMENTS SHALL APPLY AS MINIMUM STANDARDS TO ALL UNDERGROUND FACILITIES INSTALLED BY OTHER FIRMS OR PUBLIC AGENCIES.

REVISED 11-26-14

RETAINING WALLS

1. REINFORCED CONCRETE AND CONCRETE MASONRY UNIT RETAINING WALLS SHALL HAVE FOUNDATION AND REINFORCEMENT INSPECTED BY THE COUNTY ENGINEERING INSPECTOR AND ENGINEER OF RECORD PRIOR TO POURING THE FOUNDATION AND FORMING THE WALL.
2. SEGMENTAL BLOCK RETAINING WALLS SHALL HAVE FOUNDATION AND REINFORCEMENT INSPECTED BY THE COUNTY ENGINEERING INSPECTOR.

GRADING

1. EXCAVATED MATERIAL SHALL BE PLACED IN THE FILL AREAS DESIGNATED OR SHALL BE HAULED AWAY FROM THE SITE TO A COUNTY APPROVED DISPOSAL SITE. WHERE FILL MATERIAL IS TO BE PLACED ON NATURAL GROUND, IS SHALL BE STRIPPED OF ALL VEGETATION. TO ACHIEVE A PROPER BOND WITH THE FILL MATERIAL, THE SURFACE OF THE GROUND SHALL BE SCARIFIED TO DEPTH OF 6" BEFORE FILL IS PLACED. WHERE NATURAL GROUND IS STEEPER THAN 5:1, IT SHALL BE BENCHED AND THE FILL KEYED IN TO ACHIEVE STABILITY. WHERE NEW FILL IS TO BE PLACED ON EXISTING FILL THE EXISTING FILL SHALL BE REMOVED UNTIL MATERIAL COMPACTED TO 90% RELATIVE COMPACTION IS EXPOSED. THEN THE NEW FILL MATERIAL SHALL BE PLACED AS PER THESE CONSTRUCTION NOTES. FILL MATERIAL SHALL BE PLACED IN UNIFORM LIFTS NOT EXCEEDING 6" IN UNCOMPACTED THICKNESS. BEFORE COMPACTION BEGINS, THE FILL SHALL BE BROUGHT TO A WATER CONTENT THAT WILL PERMIT PROPER COMPACTION BY EITHER 1) AERATING THE FILL IF IT IS TOO WET OR 2) MOISTENING THE FILL WITH WATER IF IT IS TOO DRY. EACH LIFT SHALL BE THOROUGHLY MIXED BEFORE COMPACTION TO ENSURE A UNIFORM DISTRIBUTION OF MOISTURE.
2. EXCESS CUT MATERIAL SHALL NOT BE SPREAD OR STOCKPILED ON THE SITE.
3. SURPLUS EARTH FILL MATERIAL SHALL BE PLACED IN A SINGLE (8" MAX) THICK LAYER COMPACTED TO WITHSTAND WEATHERING IN THE AREA(S) DELINEATED ON THE PLAN.
4. NO ORGANIC MATERIAL SHALL BE PLACED IN ANY FILL. NO TREES SHALL BE REMOVED OUTSIDE OF CUT, FILL OR ROADWAY AREAS.
5. THE UPPER 6" OF SUBGRADE BELOW DRIVEWAY ACCESS ROAD OR PARKING AREA SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY.
6. MAXIMUM CUT SLOPE SHALL BE 2 HORIZONTAL TO 1 VERTICAL. MAXIMUM FILL SLOPE SHALL BE 2 HORIZONTAL TO 1 VERTICAL.

ABATEMENT			
LOCATION	CUT (C.Y.)	FILL (C.Y.)	VERT. DEPTH
AREA #1	±2,397	±1,502	±2.9/±5
AREA #2	±2,336	±369	±2.9/±1.7
AREA #3	±1,159	±219	±4.1/±2.3
AREA #4	0	±13	0/±2
AREA #5	0	±4,440	0/11.8
AREA #6	±5,472	±1,650	±13/±4
TOTAL	±11,364	±8,193	

ABATEMENT – TO BE LEGALIZED			
LOCATION	CUT (C.Y.)	FILL (C.Y.)	VERT. DEPTH
AREA 'A'	±791	±1,114	±5.4/±3
AREA 'B'	±2,867	±1,797	±13.4/±14.6
AREA 'C'	±4,787	±28,380	±7.6/±22.4
AREA 'D'	±1,743	±1,919	±9.7/±6.9
AREA 'D' ARENA SLOPE	±24	±8,336	±1.9/±11.4
AREA 'E'	±874	±131	±6.5/±4.3
HAY STORAGE AREA	±18	±76	±0.9/±2.3
TOTAL	±11,104	±41,753	

CREEK RESTORATION	±11,207	±731	

NOTE: FILL VOLUMES INCLUDE 10% SHRINKAGE.
EXCESS MATERIAL SHALL BE OFF HAULED TO A COUNTY APPROVED DUMP SITE.

7. NOTIFY SOILS ENGINEER TWO (2) DAYS PRIOR TO COMMENCEMENT OF ANY GRADING WORK TO COORDINATE THE WORK IN THE FIELD.
8. ALL MATERIALS FOR FILL SHOULD BE APPROVED BY THE SOILS ENGINEER BEFORE IT IS BROUGHT TO THE SITE.
9. THE UPPER 6" OF THE SUBGRADE SOIL SHALL BE SCARIFIED, MOISTURE CONDITIONED AND COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 95%
10. ALL AGGREGATE BASE MATERIAL SHALL BE COMPACTED TO A MINIMUM 95% RELATIVE COMPACTION.
11. THE GEOTECHNICAL PLAN REVIEW LETTER MUST BE REVIEWED AND APPROVED BY THE COUNTY GEOLOGIST PRIOR TO FINAL APPROVAL BY THE COUNTY ENGINEER FOR BUILDING OCCUPANCY.
12. THE PROJECT GEOTECHNICAL ENGINEER SHALL PERFORM COMPACTION TESTING AND PRESENT THE RESULTS TO THE COUNTY ENGINEERING INSPECTOR PRIOR TO THE CONSTRUCTION OF ANY PAVED AREA.
13. GRADING WORK BETWEEN OCTOBER 15TH AND APRIL 15TH IS AT THE DISCRETION OF THE SANTA CLARA COUNTY GRADING OFFICIAL.
14. TOTAL DISTURBED AREA FOR THE PROJECT ______________________________SF.
15. WDID NO.________________________.
16. THE INSPECTOR MAY VERIFY THAT A VALID NOTICE OF INTENT (NOI) HAS BEEN ISSUED BY THE STATE AND THAT A CURRENT AND UP TO DATE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS AVAILABLE ON SITE.

TREE PROTECTION

1. FOR ALL TREES TO BE RETAINED WITH A CANOPY IN THE DEVELOPMENT AREA OR INTERFACES WITH THE LIMITS OF GRADING FOR ALL PROPOSED DEVELOPMENT ON SITE, THE TREES SHALL BE PROTECTED BY THE PLACEMENT OF RIGID TREE PROTECTIVE FENCING, CONSISTENT WITH THE COUNTY INTEGRATED LANDSCAPE GUIDELINES, AND INCLUDE THE FOLLOWING:
   - A. FENCING SHOULD BE PLACED ALONG THE OUTSIDE EDGE OF THE DRIPLINE OF THE TREE OR GROVE OF TREES.
   - B. THE FENCING SHALL BE MAINTAINED THROUGHOUT THE SITE CONSTRUCTION PERIOD AND SHALL BE INSPECTED PERIODICALLY FOR DAMAGE AND PROPER FUNCTION.
   - C. FENCING SHALL BE REPAIRED, AS NECESSARY, TO PROVIDE A PHYSICAL BARRIER FROM CONSTRUCTION ACTIVITIES.
   - D. SIGNAGE STATING, "WARNING– THIS FENCING SHALL NOT BE REMOVED WITHOUT PERMISSION FROM THE SANTA CLARA COUNTY PLANNING OFFICE (408) 299-5770. COUNTY OF SANTA CLARA TREE PROTECTION MEASURES MAY BE FOUND AT http://www.sccplanning.gov." SHALL BE PLACED ON THE TREE PROTECTIVE FENCING UNTIL FINAL OCCUPANCY.
2. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY, TREE PROTECTIVE FENCING SHALL BE SECURELY IN PLACED AND INSPECTED BY THE LAND DEVELOPMENT ENGINEERING INSPECTOR.
3. SEE EXISTING TREE PROTECTION DETAILS FOR MORE INFORMATION.

ACCESS ROADS AND DRIVEWAYS

1. DRIVEWAY LOCATIONS SHALL BE AS SHOWN ON THE IMPROVEMENT PLANS WITH CENTERLINE STATIONING. THE MINIMUM CONCRETE THICKNESS SHALL BE 6 INCHES THROUGHOUT (WITH A MAXIMUM APPROACH SLOPE OF 1 1/4 INCHES PER FOOT).
2. ALL DRIVEWAY OR COMMON ACCESS ROAD SECTIONS IN EXCESS OF 15 LONGITUDINAL SLOPE MUST BE PAVED WITH A MINIMUM 2-INCH ASPHALT LIFT OR FULL DEPTH CONCRETE LIFT PRIOR TO ANY COMBUSTIBLE FRAMING.
3. THE OWNER AND PRIME CONTRACTOR ARE RESPONSIBLE FOR MAINTAINING PROJECT SITE ACCESS AND NEIGHBORHOOD ACCESS FOR EMERGENCY VEHICLES AND LOCAL RESIDENTS.
4. ROADWAYS DESIGNATED AS NOT COUNTY MAINTAINED ROADS AS SHOWN ON THE PLAN WILL NOT BE ELIGIBLE FOR COUNTY MAINTENANCE UNTIL THE ROADWAYS ARE IMPROVED (AT NO COST TO THE COUNTY) TO THE PUBLIC MAINTENANCE ROAD STANDARDS APPROVED BY THE BOARD OF SUPERVISORS AND IN EFFECT AT SUCH TIME THAT THE ROADWAYS ARE CONSIDERED FOR ACCEPTANCE INTO THE COUNTY'S ROAD SYSTEM.
5. ALL WORK IN THE COUNTY ROAD RIGHT-OF-WAY REQUIRES AN ENCROACHMENT PERMIT FROM THE ROADS AND AIRPORTS DEPARTMENT. EACH INDIVIDUAL ACTIVITY REQUIRES A SEPARATE PERMIT – I.E. CABLE, ELECTRICAL, GAS, SEWER, WATER, RETAINING WALLS, DRIVEWAY APPROACHES, FENCES, LANDSCAPING, TREE REMOVAL, STORM DRAINAGE IMPROVEMENTS, ETC..

STREET LIGHTING

1. PACIFIC GAS & ELECTRIC ELECTROLIER SERVICE FEE SHALL BE PAID BY THE DEVELOPER AND/OR HIS AUTHORIZED REPRESENTATIVE.

SANITARY SEWER

1. THE SANITARY SEWER AND WATER UTILITIES SHOWN ON THESE PLANS ARE NOT PART OF THIS GRADING PERMIT AND ARE SHOWN FOR REFERENCE ONLY.
2. ALL MATERIALS AND METHODS OF CONSTRUCTION OF SANITARY SEWERS SHALL CONFORM TO THE SPECIFICATIONS OF THE JURISDICTION INVOLVED. INSPECTION OF SANITARY SEWER WORK SHALL BE DONE BY SAID JURISDICTION.

PORTLAND CEMENT CONCRETE

1. CONCRETE USED FOR STRUCTURAL PURPOSES SHALL BE CLASS "A" (6 SACK PER CUBIC YARD) AS SPECIFIED IN THE STATE STANDARD SPECIFICATIONS. CONCRETE PLACED MUST DEVELOP A MINIMUM STRENGTH FACTOR OF 2800 PSI IN A SEVEN-DAY PERIOD. THE CONCRETE MIX DESIGN SHALL BE UNDER THE CONTINUAL CONTROL OF THE COUNTY INSPECTOR.

AIR QUALITY, LANDSCAPING AND EROSION CONTROL

1. WATER ALL ACTIVE CONSTRUCTION AREAS AT LEAST TWICE DAILY.
2. COVER ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS OR REQUIRE ALL TRUCKS TO MAINTAIN AT LEAST TWO FEET OF FREEBOARD.
3. PAVE, APPLY WATER THREE TIMES DAILY, OR APPLY (NON-TOXIC) SOIL STABILIZERS ON ALL UNPAVED ACCESS ROADS, PARKING AREAS AND STAGING AREAS AT CONSTRUCTION SITES.
4. SWEEP DAILY (WITH WATER SWEEPERS) ALL PAVED ACCESS ROADS, PARKING AREAS AND STAGING AREAS AT CONSTRUCTION SITES. THE USE OF DRY POWDER SWEEPING IS PROHIBITED.
5. SWEEP STREETS DAILY (WITH WATER SWEEPERS) IF VISIBLE SOIL MATERIAL IS CARRIED ONTO ADJACENT PUBLIC STREETS. THE USE OF DRY POWDER SWEEPING IS PROHIBITED.
6. ALL CONSTRUCTION VEHICLES, EQUIPMENT AND DELIVERY TRUCKS SHALL HAVE A MAXIMUM IDLING TIME OF 5 MINUTES (AS REQUIRED BY THE CALIFORNIA AIRBORNE TOXIC CONTROL MEASURE TITLE 13, SECTION 2485 OF CALIFORNIA CODE OF REGULATIONS (CCR)). ENGINES SHALL BE SHUT OFF IF CONSTRUCTION REQUIRES LONGER IDLING TIME UNLESS NECESSARY FOR PROPER OPERATION OF THE VEHICLE.
7. ALL VEHICLE SPEEDS ON UNPAVED ROADS SHALL BE LIMITED TO 15 MILES PER HOUR.
8. ALL CONSTRUCTION EQUIPMENT SHALL BE MAINTAINED AND PROPERLY TUNED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. ALL EQUIPMENT SHALL BE CHECKED BY A CERTIFIED MECHANIC AND DETERMINED TO BE RUNNING IN PROPER CONDITION PRIOR TO OPERATION.
9. POST A SIGN THAT IS AT LEAST 32 SQUARE FEET MINIMUM 2 INCHES LETTER HEIGHT VISIBLE NEAR THE ENTRANCE OF CONSTRUCTION SITE THAT IDENTIFIES THE FOLLOWING REQUIREMENTS. OBTAIN ENCROACHMENT PERMIT FOR SIGN FROM ROADS DEPARTMENT OR OTHER APPLICABLE AGENCY IF REQUIRED.

A. 15 MILES PER HOUR (MPH) SPEED LIMIT
B. 5 MINUTES MAXIMUM IDLING TIME OF VEHICLES
C. TELEPHONE NUMBER TO CONTACT THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT REGARDING DUST COMPLAINTS. NOTE PHONE NUMBER OF THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT AIR POLLUTION COMPLAIN HOTLINE OF 1-800-334-6367.

10. ALL FILL SLOPES SHALL BE COMPACTED AND LEFT IN A SMOOTH AND FIRM CONDITION CAPABLE OF WITHSTANDING WEATHERING.
11. ALL EXPOSED DISTURBED AREAS SHALL BE SEEDED WITH NATIVE BROME SEED (OR OTHER NATIVE GRASS) SPREAD AT THE RATE OF 5 LB. PER 1000 SQUARE FEET (OR APPROVED EQUAL). SEEDING AND WATERING SHALL BE MAINTAINED AS REQUIRED TO ENSURE GROWTH.
12. ALL DITCHES SHALL BE LINED PER COUNTY STANDARD SD8.
13. ALL STORM DRAINAGE STRUCTURES SHALL BE INSTALLED WITH EFFECTIVE ENTRANCE & OUTFALL EROSION CONTROLS E.G. SACKED CONCRETE RIP-RAP. ENERGY DISSIPATERS SHALL BE INSTALLED AT ALL DITCH OUTFALLS. WHERE OUTFALLS ARE NOT INTO AN EXISTING CREEK OR WATER COURSE, RUNOFF SHALL BE RELEASED TO SHEET FLOW.
14. PRIOR TO GRADING COMPLETION AND RELEASE OF THE BOND, ALL GRADED AREAS SHALL BE RESEEDED IN CONFORMANCE WITH THE COUNTY GRADING ORDINANCE TO MINIMIZE THE VISUAL IMPACTS OF THE GRADE SLOPES AND REDUCE THE POTENTIAL FOR EROSION OF THE SUBJECT SITE.
15. PERMANENT LANDSCAPING SHOWN ON THE ATTACHED LANDSCAPE PLAN MUST BE INSTALLED AND FIELD APPROVED BY THE COUNTY PLANNING OFFICE PRIOR TO FINAL APPROVAL BY THE COUNTY ENGINEER, AND FINAL OCCUPANCY RELEASE BY THE BUILDING INSPECTION OFFICE.
16. THE OWNER SHALL PREPARE AND PRESENT A WINTERIZATION REPORT TO THE COUNTY INSPECTOR FOR REVIEW PRIOR TO OCTOBER 15TH OF EVERY YEAR.
17. THE OWNER, CONTRACTOR, AND ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES SHALL INSTALL AND MAINTAIN CONSTRUCTION BEST MANAGEMENT PRACTICES (BMPS) ON THE PROJECT SITE AND WITHIN THE SANTA CLARA COUNTY ROAD RIGHT-OF-WAY THROUGHOUT THE DURATION OF THE CONSTRUCTION AND UNTIL THE ESTABLISHMENT OF PERMANENT STABILIZATION AND SEDIMENT CONTROL TO PREVENT THE DISCHARGE OF POLLUTANTS INCLUDING SEDIMENT, CONSTRUCTION MATERIALS, EXCAVATED MATERIALS, AND WASTE INTO THE SANTA CLARA COUNTY RIGHT-OF-WAY, STORM SEWER WATERWAYS, ROADWAY INFRASTRUCTURE. BMPS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING;

A. PREVENTION OF POLLUTANTS IN STORM WATER DISCHARGES FROM THE CONSTRUCTION SITE AND THE CONTRACTOR'S MATERIAL AND EQUIPMENT LAYDOWN / STAGING AREAS.
B. PREVENTION OF TRACKING OF MUD, DIRT, AND CONSTRUCTION MATERIALS ONTO THE PUBLIC ROAD RIGHT-OF-WAY.
C. PREVENTION OF DISCHARGE OF WATER RUN-OFF DURING DRY AND WET WEATHER CONDITIONS ONTO THE PUBLIC ROAD RIGHT-OF-WAY.

18. THE OWNER, CONTRACTOR, AND ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES SHALL ENSURE THAT ALL TEMPORARY CONSTRUCTION FACILITIES, INCLUDING BUT NOT LIMITED TO CONSTRUCTION MATERIALS, DELIVERIES, HAZARDOUS AND NON-HAZARDOUS MATERIAL STORAGE, EQUIPMENT, TOOLS, PORTABLE TOILETS, CONCRETE WASHOUT, GARBAGE CONTAINERS, LAYDOWN YARDS, SECONDARY CONTAINMENT AREAS, ETC. ARE LOCATED OUTSIDE THE SANTA CLARA COUNTY ROAD RIGHT-OF-WAY.
19. EROSION CONTROL PLAN IS A GUIDE AND SHALL BE AMENDED AS NECESSARY TO PREVENT EROSION AND ILLICIT DISCHARGES ON A YEAR AROUND BASIS, DEPENDING ON THE SEASON, WEATHER, AND FIELD CONDITIONS. EROSION CONTROL MEASURES IN ADDITION TO THOSE NOTED IN THE PERMITTED PLANS MAY BE NECESSARY. FAILURE TO INSTALL SITE SITE AND SITUATIONALY APPROPRIATE EROSION CONTROL MEASURES MAY RESULT IN VIOLATIONS, FINES, AND A STOPPAGE OF WORK.

STORM DRAINAGE AND STORMWATER MANAGEMENT

1. DEVELOPER IS RESPONSIBLE FOR ALL NECESSARY DRAINAGE FACILITIES WHETHER SHOWN ON THE PLANS OR NOT AND HE OR HIS SUCCESSOR PROPERTY OWNERS ARE RESPONSIBLE FOR THE ADEQUACY AND CONTINUED MAINTENANCE OF THESE FACILITIES IN A MANNER WHICH WILL PRECLUDE ANY HAZARD TO LIFE, HEALTH, OR DAMAGE TO ADJOINING PROPERTY, CONSISTENT WITH NPDES PERMIT CAS612008 / ORDER NO. R2-2009-0047 AND NPDES PERMIT CAS000004/ ORDER NO. 2013-0001-DWQ.
2. DROP INLETS SHALL BE COUNTY STANDARD TYPE 5 UNLESS OTHERWISE NOTED ON THE PLANS. THE DEVELOPER'S ENGINEER SHALL BE RESPONSIBLE FOR THE PROPER LOCATION OF DROP INLETS. WHERE STREET PROFILE GRADE EXCEEDS 6% DROP INLETS SHALL BE SET AT 500 ANGLE CURB LINE TO ACCEPT WATER OR AS SHOWN ON THE PLANS.
3. WHERE CULVERTS ARE INSTALLED THE DEVELOPER SHALL BE RESPONSIBLE FOR GRADING THE OUTLET DITCH TO DRAIN TO AN EXISTING SWALE OR TO AN OPEN AREA FOR SHEET FLOW.
4. UPON INSTALLATION OF DRIVEWAY CONNECTIONS, PROPERTY OWNERS SHALL PROVIDE FOR THE UNINTERRUPTED FLOW OF WATER IN ROADSIDE DITCHES.
5. THE COUNTY SHALL INSPECT UNDERGROUND DRAINAGE IMPROVEMENTS AND STORMWATER MANAGEMENT FEATURES PRIOR TO BACKFILL.

AS-BUILT PLANS STATEMENT

THIS IS A TRUE COPY OF THE AS-BUILT PLANS. THERE (___ WERE) (___ WERE NOT) MINOR FIELD CHANGES – MARKED WITH THE SYMBOL (^). THERE (___WERE) (___ WERE NOT) PLAN REVISIONS INDICATING SIGNIFICANT CHANGES REVIEWED BY THE COUNTY ENGINEER AND MARKED WITH THE SYMBOL △.

DATE____________________ SIGNATURE ______________________________

NOTE: THIS STATEMENT IS TO BE SIGNED BY THE PERSON AUTHORIZED BY THE COUNTY ENGINEER TO PERFORM THE INSPECTION WORK. A REPRODUCIBLE COPYOF THE AS-BUILT PLANS MUST BE FURNISHED TO THE COUNTY ENGINEER AFTERCONSTRUCTION.

GEOTECHNICAL ENGINEER OBSERVATION

1. A CONSTRUCTION OBSERVATION LETTER FROM THE RESPONSIBLE GEOTECHNICAL ENGINEER AND ENGINEERING GEOLOGIST DETAILING CONSTRUCTION OBSERVATIONS AND CERTIFYING THAT THE WORK WAS DONE IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL AND GEOLOGIC REPORTS SHALL BE SUBMITTED PRIOR TO THE GRADING COMPLETION AND RELEASE OF THE BOND.

COUNTY LOCATION MAP

SURVEY MONUMENT PRESERVATION

1. THE LANDOWNER/CONTRACTOR MUST PROTECT AND ENSURE THE PERPETUATION OF SURVEY MONUMENTS AFFECTED BY CONSTRUCTION ACTIVITIES.
2. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL LOCATE, STAKE, AND FLAG ALL PERMANENT SURVEY MONUMENTS OF RECORD AND ANY UNRECORDED MONUMENTS THAT ARE DISCOVERED THAT ARE WITHIN 50 FEET OF THE CONSTRUCTION ACTIVITY.
3. THE LANDOWNER, CONTRACTOR AND/OR ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES THAT WILL OR MAY DISTURB AN EXISTING MONUMENT, CORNER STAKE, OR ANY OTHER PERMANENT SURVEYED MONUMENT SHALL CAUSE TO HAVE A LICENSED LAND SURVEYOR OR CIVIL ENGINEER, AUTHORIZED TO PRACTICE SURVEYING, ENSURE THAT A CORNER RECORD AND/OR RECORD OF SURVEY ARE FILED WITH THE COUNTY SURVEYOR'S OFFICE PRIOR TO DISTURBING SAID MONUMENTS AND RESET PERMANENT MONUMENT(S) TO PERPETUATE THE LOCATION IF ANY PERMANENT MONUMENT COULD BE DESTROYED, DAMAGED, COVERED, DISTURBED, OR OTHERWISE OBLITERATED. THE LICENSED LAND SURVEYOR OR CIVIL ENGINEER SHALL FILE A CORNER RECORD OR RECORD OF SURVEY WITH COUNTY SURVEYOR PRIOR TO FINAL ACCEPTANCE OF THE PROJECT BY THE LAND DEVELOPMENT ENGINEERING INSPECTOR.

EXISTING TREE PROTECTION DETAILS

1. PRIOR TO THE COMMENCEMENT OF ANY GRADING, TREE PROTECTIVE FENCING SHALL BE IN PLACE IN ACCORDANCE WITH THE TREE PRESERVATION PLAN AND INSPECTED BY A CERTIFIED ARBORIST. THE ARBORIST SHALL MONITOR CONSTRUCTION ACTIVITY TO ENSURE THAT THE TREE PROTECTION MEASURES ARE IMPLEMENTED AND ADHERED TO DURING CONSTRUCTION. THIS CONDITION SHALL BE INCORPORATED INTO THE GRADING PLANS.
2. FENCE SHALL BE MINIMUM 5 FEET TALL CONSTRUCTED OF STURDY MATERIAL (CHAIN-LINK OR EQUIVALENT STRENGTH/ DURABILITY).
3. FENCE SHALL BE SUPPORTED BY VERTICAL POSTS DRIVEN 2 FEET (MIN) INTO THE GROUND AND SPACED NOT MORE THAN 10 FEET APART.
4. TREE FENCING SHALL BE MAINTAINED THROUGHOUT THE SITE DURING THE CONSTRUCTION PERIOD, INSPECTED PERIODICALLY FOR DAMAGE AND PROPER FUNCTION, REPAIRED AS NECESSARY TO PROVIDE A PHYSICAL BARRIER FROM CONSTRUCTION ACTIVITIES, AND REMAIN IN PLACE UNTIL THE FINAL INSPECTION.
5. A SIGN THAT INCLUDES THE WORDS, "WARNING: THIS FENCE SHALL NOT BE REMOVED WITHOUT THE EXPRESSED PERMISSION OF THE SANTA CLARA COUNTY PLANNING OFFICE," SHALL BE SECURELY ATTACHED TO THE FENCE IN A VISUALLY PROMINENT LOCATION.

COUNTY OF SANTA CLARA DEPT. OF ROADS AND AIRPORTS
ISSUED BY: ____________ DATE: ____________
ENCROACHMENT PERMIT NO. ____________

COUNTY OF SANTA CLARA
LAND DEVELOPMENT ENGINEERING & SURVEYING
GRADING/DRAINAGE PERMIT NO. ____________
ISSUED BY: ____________ DATE: ____________

NO WORK SHALL BE DONE IN THE COUNTY'S RIGHT-OF-WAY WITHOUT AN ENCROACHMENT PERMIT, INCLUDING THE STAGING OF CONSTRUCTION MATERIAL AND THE PLACEMENT OF PORTABLE TOILETS.

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

ENGINEER'S STATEMENT

I HEARBY STATE THAT THESE PLANS ARE IN COMPLIANCE WITH ADOPTED COUNTY STANDARDS, THE APPROVED TENTATIVE MAP (OR PLAN) AND CONDITIONS OF APPROVAL PERTAINING THERETO DATED ____________ FILE(S) NO.

DATE ____________ ____________

69278
R.C.E. NO.

AMANDA JOY MUSY-VERDEL
NO. 69278

COUNTY ENGINEER'S NOTE

ISSUANCE OF A PERMIT AUTHORIZING CONSTRUCTION DOES NOT RELEASE THE DEVELOPER, PERMITTEE OF ENGINEER FROM RESPONSIBILITY FOR THE CORRECTION OF ERRORS OR OMISSIONS CONTAINED IN THE PLANS. IF, DURING THE COURSE OF CONSTRUCTION, THE PUBLIC INTEREST REQUIRES A MODIFICATION OF (OR DEPARTURE FROM) THE SPECIFICATIONS OF THE PLANS, THE COUNTY SHALL HAVE THE AUTHORITY TO REQUIRE THE SUSPENSION OF WORK, AND THE NECESSARY MODIFICATION OR DEPARTURE AND TO SPECIFY THE MANNER IN WHICH THE SAME IS TO BE MADE.

DATE ____________ ____________
DARRELL K.H. WONG
____
R.C.E. NO. 63958

VICINITY MAP
NO SCALE

SCOPE OF WORK

1. THE DEVELOPER IS RESPONSIBLE FOR THE INSTALLATION OF THE WORK PROPOSED ON THE EROSION CONTROL PLAN. THE ENGINEER OF RECORD IS RESPONSIBLE FOR THE DESIGN OF THE EROSION CONTROL PLANS AND ANY MODIFICATIONS OF THE EROSION CONTROL PLANS TO PREVENT ILLICIT DISCHARGES FROM THE SITE DURING CONSTRUCTION.
2. A CONSTRUCTION OBSERVATION LETTER FROM THE RESPONSIBLE GEOTECHNICAL ENGINEER AND CERTIFIED ENGINEERING GEOLOGIST DETAILING CONSTRUCTION OBSERVATIONS AND CERTIFYING THAT THE WORK WAS DONE IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL AND GEOLOGICAL REPORTS SHALL BE SUBMITTED PRIOR TO GRADING COMPLETION AND RELEASE OF BOND.
3. RESTORE AREAS TO ORIGINAL CONDITION
4. ALL EXPOSED DISTURBED AREAS SHALL BE HYDROSEEDED WITH NATIVE BROME GRASS OR OTHER NATIVE GRASS
5. DRIVEWAY TO BE MADE OF AN ALL WEATHER MATERIAL CAPABLE OF HOLDING 75,000 POUNDS.
6. BRIDGE TO BE CAPABLE OF HOLDING 75,000 POUNDS.

SHEET INDEX

1	COVER SHEET
2	OVERALL SITE PLAN
3	SITE PLAN – 200 SCALE
4–15	ABATEMENT PLANS
16–17	PLAN & PROFILE – PRIVATE DRIVEWAY
18	CROSS SECTIONS – PRIVATE DRIVEWAY
19	NOTES, ABBREVIATIONS AND LEGEND
20	EROSION CONTROL PLAN
BMP1&2	BEST MANAGEMENT PRACTICES

ENGINEER'S NAME: HANNA & BRUNETTI
ADDRESS: 7651 EIGLEBERRY STREET, GILROY CA 95020
PHONE NO. 408 842-2173
FAX NO. 408 842-3662

PRELIMINARY
ABATEMENT PLANS
FOR
ON THE LANDS OF BOURDET
PACHECO PASS HIGHWAY
ALL OF PARCEL 2 AS SHOWN IN BOOK 327 OF MAPS AT PAGES 25-26
FILED ON JULY 30th, 1973
SANTA CLARA COUNTY, CALIFORNIA
A.P.N.: 898-19-005 & 043

AUGUST 2022
NO SCALE

Revision 1	Date	APN 898–19–005 & 043	Sheet 1 of 22
Revision 2	Date	Co. File PLN20–139	
Revision 3	Date		

APPLICANT: BOURDET
ROAD: PACHECO PASS HIGHWAY
COUNTY FILE NO.: PLN20–139
JOB NO. 18085

APN 898-53-003 RANEA LIMITED PARTNERSHIP

APN 898-54-004 RANEA LIMITED PARTNERSHIP

APN 898-55-001 GIOVANNOTTO

APN 898-56-001 GIOVANNOTTO

10737.58

N79° 25' 12"W

UNITED STATES OF AMERICA APN 898-38-005

1654.20

S10° 34' 48"W 150.00

S85° 39' 00"W

S28° 21' 50"W 150.00

UNITED STATES OF AMERICA APN 898-38-003

882.00

811.05

S47° 44' 45"W

S42° 32' 00"W

PACHECO PASS HIGHWAY

APN 898-38-006 SANTA CLARA VALLEY HABITAT AGENCY

S16° 52' 30"W 195.25

S48° 24' 00"E 182.60

S10° 14' 10"E 105.40

S34° 16' 00"W 1014.10

EXISTING STOCKPILE TO BE REMOVED

N82° 01' 40"W 1995.80

P.G.&E. TRANSMISSION LINE

AREA 'A'
EXISTING GRADING VIOLATION TO BE LEGALIZED
SEE SHEET 4

PRIVATE DRIVEWAY
EXISTING GRADING VIOLATION TO BE LEGALIZED
SEE SHEETS 16-17

AREA #1
EXISTING DIRT ROAD TO BE REMOVED AND RESTORED TO ORIGINAL CONDITION
SEE SHEETS 14 AND 15

APN 898-19-029 BOURDET

AREA #2
EXISTING DIRT ROAD TO BE REMOVED AND RESTORED TO ORIGINAL CONDITION
SEE SHEET 12

AREA #3
EXISTING DIRT ROAD TO BE REMOVED AND RESTORED TO ORIGINAL CONDITION
SEE SHEET 14

AREA #4
EXISTING DRAINAGE SWALE TO BE REMOVED AND RESTORED TO ORIGINAL CONDITION
SEE SHEET 10

AREA #5
EXISTING POND TO BE LEGALIZED
SEE SHEET 11

AREA #6
EXISTING POND TO BE REMOVED AND RESTORED TO ORIGINAL CONDITION
SEE SHEET 12

APN 898-19-003 BOURDET

APN 898-19-005 BOURDET

APN 898-19-043 BOURDET

APN 898-21-018 BOURDET

S31° 54' 14"W 2291.75

AREA 'B'
EXISTING GRADING VIOLATION TO BE LEGALIZED
SEE SHEET 5

AREA 'C'
EXISTING GRADING VIOLATION TO BE LEGALIZED
SEE SHEET 6

AREA 'D'
EXISTING GRADING VIOLATION TO BE LEGALIZED
SEE SHEETS 7-8

AREA 'E'
EXISTING GRADING VIOLATION TO BE LEGALIZED
SEE SHEET 9

HARPER CANYON CREEK RESTORATION
SEE PLANS FROM WALLS LAND+WATER, LLC
320 ALAMO AVENUE, SANTA CRUZ
CA 95060 - 831 246-1718

1707.70 S35° 42' 30"E

766.80 S43° 08' 00"E

2040.80 S39° 39' 40"E

2217.99 S41° 03' 09"E

APN 898-37-004 HAWKINS RANCH LLC

APN 898-37-003 HAWKINS RANCH LLC

APN 898-18-004 HAWKINS RANCH LLC

APN 898-18-009 HAWKINS RANCH LLC

APN 898-18-003 HAWKINS RANCH LLC

3033.42 N65° 21' 00"E

S46° 19' 10"E 7272.60

APN 898-19-033 BOURDET

APN 898-19-037 BOURDET

APN 898-19-036 BOURDET

APN 898-19-039 BOURDET

APN 898-19-040 STATE OF CALIFORNIA

1.726 ACRE EXCEPTION STATE OF CALIFORNIA 8607 O.R. 474

U.S.C.&G.S. STATION "PACHECO, 1943"

APN 898-15-008 HANSEN RANCH LLC

APN 898-15-007 HANSEN RANCH LLC

APN 898-15-003 HANSEN RANCH LLC

APN 898-15-001 BENGARD

APN 898-36-005 BENGARD

APN 898-36-006 BOURDET

APN 898-36-004 BENGARD

APN 898-18-025 BENGARD

APN 898-18-026

N06° 58' 10"E 383.25

627.00 N02° 00' 00"E

1320.00 N01° 30' 00"E

1772.50 N00° 52' 20"W

N41° 53' 30"E 201.70

N28° 06' 10"W 99.10

2649.90 N38° 00' 00"E

N89° 45' 00"E 266.52

4546.96 N06° 55' 50"E

N76° 00' 40"W 72.60

S11° 19' 40"W 60.32

S63° 11' 20"W 240.40

S62° 11' 30"W 352.70

S60° 37' 10"W 562.25

N41° 56' 00"W 55.40

S74° 10' 00"W 264.37

1975.01 BOURDET S83° 05' 00"E

N28° 16' 30"W 63.30

UNPLOTTABLE EASEMENT:

1. AN EASEMENT AND RIGHT OF WAY FOR A ROADWAY TWENTY (20) FEET IN WIDTH, OVER AND ALONG AN EXISTING ROADWAY EXTENDING FROM PACHECO PASS STATE HIGHWAY IN A GENERALLY EASTERLY DIRECTION TO THE 1.726 ACRE PARCEL (8607 O.R. 474)
2. PURPOSE: POLE LINE EASEMENT; GRANTED TO: SIERRA AND SAN FRANCISCO POWER COMPANY; BOOK 210 O.R. PAGE 389
2. PURPOSE: POLE LINE EASEMENT; GRANTED TO: SIERRA AND SAN FRANCISCO POWER COMPANY; BOOK 239 O.R. PAGE 592
3. PURPOSE: PIPE LINE(S); GRANTED TO: COAST NATURAL GAS COMPANY; BOOK 597 O.R. 588
4. PURPOSE: DAMS, CHANNELS AND DITCHES; GRANTED TO: C.N. HAWKINS; BOOK 685 O.R. 397
5. PURPOSE: ELECTRICAL FACILITIES; GRANTED TO: PACIFIC GAS AND ELECTRIC COMPANY, A CALIFORNIA CORPORATION; INSTRUMENT NO. 9619735 O.R.
6. PURPOSE: DRAINAGE AND FLOW FROM FLOOD, CREEK, DRAINAGE, SURFACE OR OTHER WATERS; GRANTED TO: STATE OF CALIFORNIA; INSTRUMENT NO. 19246399 O.R.

ARCHAEOLOGICAL NOTE:

1. IF ARCHAEOLOGICAL RESOURCES OR HUMAN REMAINS ARE DISCOVERED DURING CONSTRUCTION, WORK SHALL BE HALTED WITHIN 50 METERS (150 FEET) OF THE FIND UNTIL IT CAN BE EVACUATED BY A QUALIFIED PROFESSIONAL ARCHAEOLOGIST. IF THE FIND IS DETERMINED TO BE SIGNIFICANT, APPROPRIATE MITIGATION MEASURES SHALL BE FORMULATED AND IMPLEMENTED. IF HUMAN REMAINS ARE FOUND DURING CONSTRUCTION THERE SHALL BE NO FURTHER EXCAVATION OR DISTURBANCE OF THE SITE OR ANY NEARBY AREA REASONABLY SUSPECTED TO OVERLIE ADJACENT HUMAN REMAINS UNTIL THE CORONER OF SANTA CLARA COUNTY IS CONTACTED TO DETERMINE THAT NO INVESTIGATION OF THE CAUSE OF DEATH IS REQUIRED. IF THE CORONER DETERMINES THE REMAINS TO BE NATIVE AMERICAN THE CORONER SHALL CONTACT THE NATIVE AMERICAN HERITAGE COMMISSION WITHIN 24 HOURS. THE NATIVE AMERICAN HERITAGE COMMISSION SHALL IDENTIFY THE PERSON OR PERSONS IT BELIEVES TO BE THE MOST LIKELY DESCENDENT (MLD) FROM THE DECEASED NATIVE AMERICAN. THE MLD MAY THEN MAKE RECOMMENDATION TO THE LANDOWNER OR THE PERSON RESPONSIBLE FOR THE EXCAVATION WORK, FOR MEANS OF TREATING OR DISPOSING OF, WITH APPROPRIATE DIGNITY, THE HUMAN REMAINS AND ASSOCIATED GRAVE GOODS AS PROVIDED IN PUBLIC RESOURCES CODE SECTION 5097.98. THE LANDOWNER OR HIS AUTHORIZED REPRESENTATIVE SHALL REBURY THE NATIVE AMERICAN HUMAN REMAINS AND ASSOCIATED GRAVE GOODS WITH APPROPRIATE DIGNITY ON THE PROPERTY IN A LOCATION NOT SUBJECT TO FURTHER DISTURBANCE IF:
   a) THE NATIVE AMERICAN HERITAGE COMMISSION IS UNABLE TO IDENTIFY A MLD OR THE MLD FAILED TO MAKE A RECOMMENDATION WITHIN 24 HOURS AFTER BEING NOTIFIED BY THE COMMISSION.
   b) THE DESENDENT IDENTIFIED FAILS TO MAKE A RECOMMENDATION; OR
   c) THE LANDOWNER OR HIS AUTHORIZED REPRESENTATIVE REJECTS THE RECOMMENDATION OF THE DESCENDENT, AND THE MEDIATION BY THE NATIVE AMERICAN HERITAGE COMMISSION FAILS TO PROVIDE MEASURES ACCEPTABLE TO THE LANDOWNER. INCORPORATE THE FOLLOWING NOTE ON THE PROJECT PLANS. IF ARCHAEOLOGICAL RESOURCES OR HUMAN REMAINS ARE DISCOVERED DURING CONSTRUCTION, WORK SHALL BE HALTED WITHIN 50 METERS (165 FEET) OF THE FIND UNTIL A QUALIFIED PROFESSIONAL ARCHAEOLOGIST CAN EVALUATE IT. IF THE FIND IS DETERMINED TO BE SIGNIFICANT, APPROPRIATE MITIGATION MEASURES SHALL BE FORMULATED AND IMPLEMENTED.

BASIS OF BEARINGS:

THE BEARINGS AND DISTANCES SHOWN ON THIS PLANS ARE BASED ON THE RECORD OF SURVEY IN BOOK 327 OF MAPS AT PAGES 25-26 ON JULY 30th, 1973.

BENCHMARK:

DESIGNATION: HPGN D CA BELL
PID: AA1864
ELEVATION: 412.0 FEET (NAVD 88)

THE STATION IS LOCATED NEAR THE BELL STATION ROAD HOUSE, ABOUT 14 MI (22.5 KM) EAST OF THE CITY OF GILROY AND ABOUT 13 MI (20.9 KM) NORTHEAST OF THE CITY OF HOLLISTER.

FLOOD ZONE STATEMENT:

FLOOD INSURANCE RATE MAP
COMMUNITY PANEL NUMBER: 060337 0608SC0700H
MAP REVISED: MAY 18, 2009

PROJECT LOCATED IN ZONE A AND D
ZONE A = NO BASE FLOOD ELEVATIONS DETERMINED
ZONE D = AREAS OF UNDETERMINED, BUT POSSIBLE FLOOD HAZARDS

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

GRAPHIC SCALE
600 0 300 600 1200 2400
(IN FEET)
1 inch = 600 ft.

PLAN # _____ OF _____
SHEET _____

REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1920
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3662
EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: AUGUST 2022
HORIZ. SCALE: 1"=600
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY: _____
DRAWN BY: T.M.

date: _____
Hanna - Brunetti

Amanda Joy Musy-Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEZ
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Overall Site Plan

Lands of Bourdet - Pacheco Pass Highway - apn 898-19-005 & 043

UNINCORPORATED
AUGUST 2022

SANTA CLARA COUNTY
CALIFORNIA

SHEET 2 OF 22

JOB NO. 18085

APPLICANT: BOURDET | ROAD: PACHECO PASS HIGHWAY | COUNTY FILE NO.: PLN20-139 | JOB NO. 18085

N82° 01' 40"W
1995.80

P.G.&E. TRANSMISSION LINE

PACHECO PASS HIGHWAY

EXISTING STOCKPILE
TO BE REMOVED

PRIVATE DRIVEWAY
EXISTING GRADING VIOLATION
TO BE LEGALIZED
SEE SHEETS 16–17

AREA 'A'
EXISTING GRADING VIOLATION
TO BE LEGALIZED
SEE SHEET 4

S31° 54' 14"W
2281.75

AREA 'B'
EXISTING GRADING VIOLATION
TO BE LEGALIZED
SEE SHEET 5

HARPER CANYON CREEK RESTORATION
SEE PLANS FROM WALLS LAND+WATER, LLC
320 ALAMO AVENUE, SANTA CRUZ
CA 95060 – 831 246–1718

AREA 'C'
EXISTING GRADING VIOLATION
TO BE LEGALIZED
SEE SHEET 6

AREA 'D'
EXISTING GRADING VIOLATION
TO BE LEGALIZED
SEE SHEETS 7–8

1707.70
S35° 42' 30"E

766.80
S43° 08' 00"E

AREA 'E'
EXISTING GRADING VIOLATION
TO BE LEGALIZED
SEE SHEET 9

GRAPHIC SCALE
200 0 100 200 400 800
(IN FEET)
1 inch = 200 ft.

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PLAN # _____
SHEET _____ OF _____

REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1910
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3662
EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: AUGUST 2022
HORIZ. SCALE: 1"=100
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY: _____
DRAWN BY: T.M.

date: _____
Hanna – Brunetti

Amanda Joy Musy–Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEL
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Site Plan - 200 scale

Lands of Bourdet - Pacheco Pass Highway - apn 898-19-005 & 043

UNINCORPORATED
AUGUST 2022

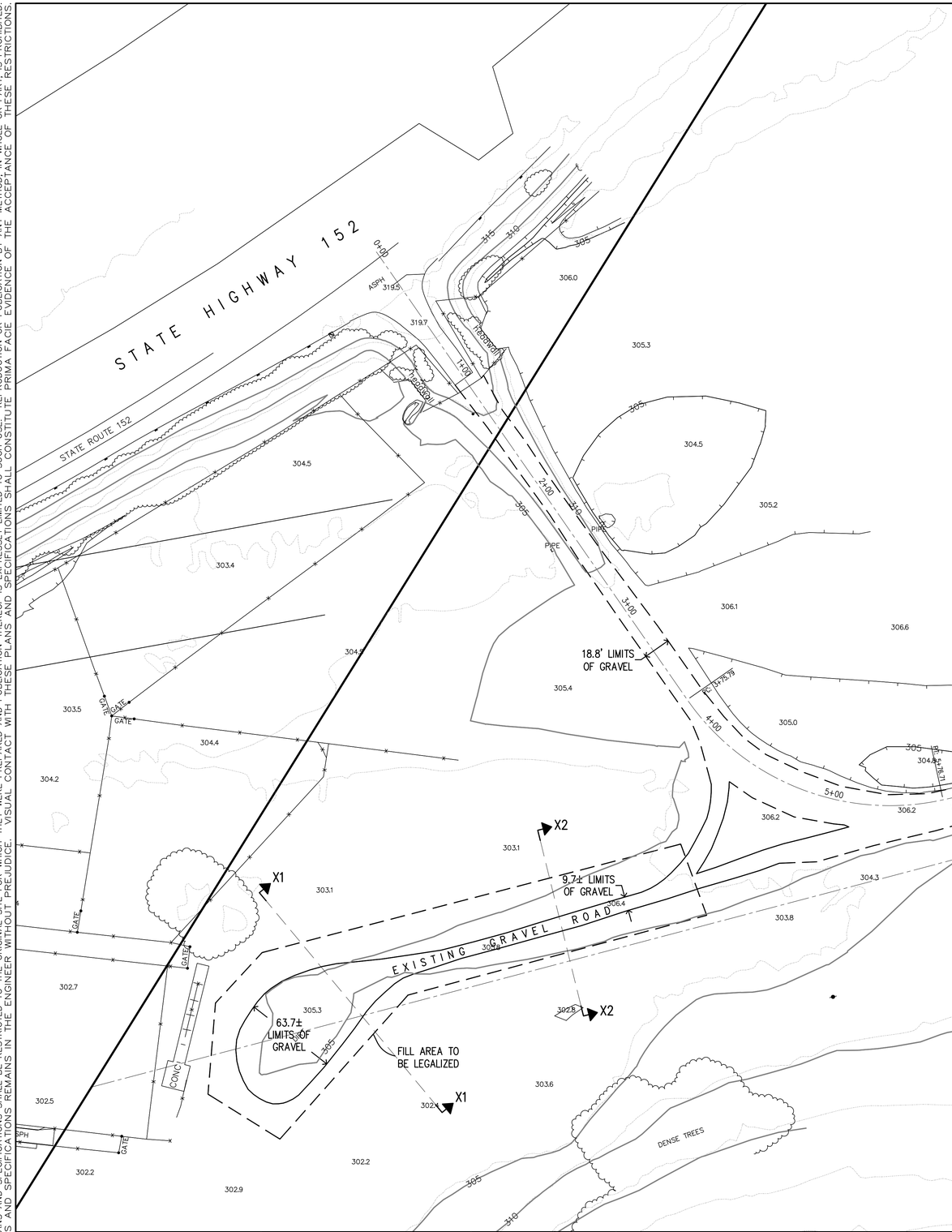
SANTA CLARA COUNTY
CALIFORNIA

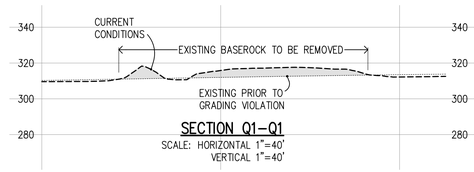
SHEET 3 OF 22

JOB NO. 18085

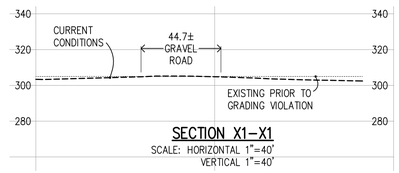
APPLICANT: BOURDET | ROAD: PACHECO PASS HIGHWAY | COUNTY FILE NO.: PLN20–139 | JOB NO. 18085

PLAN # _____
SHEET _____ OF _____

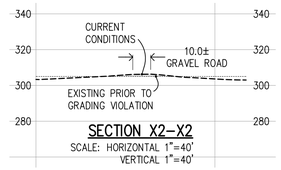




SECTION Q1–Q1
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



SECTION X1–X1
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

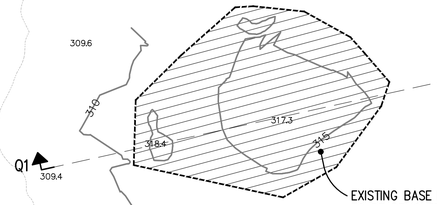


SECTION X2–X2
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

LEGEND
- FLOWLINE (CURRENT CONDITIONS)
- FLOWLINE (LIDAR)
- CONTOUR (CURRENT CONDITIONS) TOPOGRAPHY FROM SURVEY: JANUARY 29, 2020
- CONTOUR (LIDAR) SANTA CLARA COUNTY: 2016

NOTICE TO CONTRACTOR:

1. ALL EXPOSED DISTURBED AREAS SHALL BE HYDROSEEDED WITH NATIVE BROME GRASS OR OTHER NATIVE GRASS
2. ROADS SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOAD OF FIRE APPARATUS WEIGHING AT LEAST 75,000 POUNDS AND PROVIDE AN AGGREGATE BASE.



PRELIMINARY PLANS
NOT FOR CONSTRUCTION

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

REVISIONS:		
DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1952
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3662
EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: AUGUST 2022
HORIZ. SCALE: 1"=40'
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY: _____
DRAWN BY: T.M.

date: _____
Hanna – Brunetti

Amanda Joy Musy–Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEL
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Abatement Plan - Area A

Lands of Bourdet - Pacheco Pass Highway - apn 898-19-005 & 043

UNINCORPORATED
AUGUST 2022

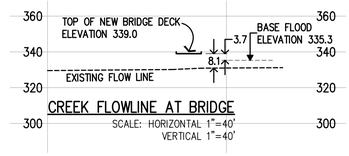
SANTA CLARA COUNTY
CALIFORNIA

SHEET 4 OF 22
JOB NO. 18085

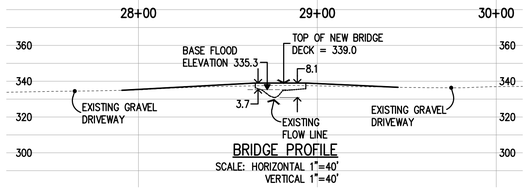
APPLICANT: BOURDET | ROAD: PACHECO PASS HIGHWAY | COUNTY FILE NO.: PLN20–139 | JOB NO. 18085

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

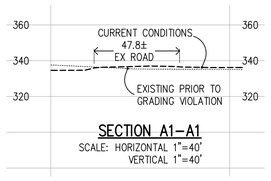
EX INV 325.8± PIPE
EXISTING CS PIPE
EX INV 326.5± PIPE
PROPOSED DETENTION POND
2,800 SF TREATMENT AREA
19.5' LIMITS OF GRAVEL
EXISTING CATTLE GUARD CROSSING
VALLEY OAK TREE
NOTE: GRADE TO DRAIN TO PROPOSED BIORETENTION POND
80.0 FIRE TRUCK TURNAROUND AREA
83.4'
ASPH
FIRE HYDRANT
WATER TANKS
EXISTING BARN
EXISTING KENNEL
EXISTING BUILDING
EXISTING PROPANE TANK
DENSE TREES
FLOODPLAIN BOUNDARY
ZONE A
ZONE D
GRAVEL
EXISTING UNPERMITTED BRIDGE TO BE REMOVED AND REPLACED TOP OF NEW BRIDGE DECK = 339.0
PROVIDE SIGNAGE ON BRIDGE CAPABILITY (BRIDGE SHALL BE CAPABLE OF HOLDING 75,000 POUNDS)
PROVIDE GRAVEL TRANSITION FROM EXISTING GRAVEL ROAD TO NEW BRIDGE DECK
PROVIDE GRAVEL TRANSITION FROM EXISTING GRAVEL ROAD TO NEW BRIDGE DECK
23.2' LIMITS OF GRAVEL
EXISTING CULVERT
PIPE 345
23.5' LIMITS OF GRAVEL
AMERICAN SYCAMORE TREE
EXISTING TOP OF BANK
19.4' LIMITS OF GRAVEL
A1 A2 A3 A4 B1 B2 C1



CREEK FLOWLINE AT BRIDGE
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



BRIDGE PROFILE
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



SECTION A1–A1
SCALE: HORIZONTAL 1"=40'
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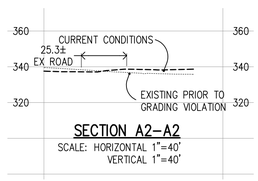

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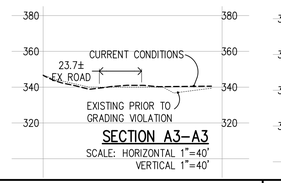

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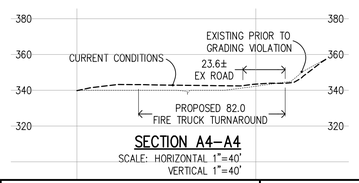

SECTION A4–A4
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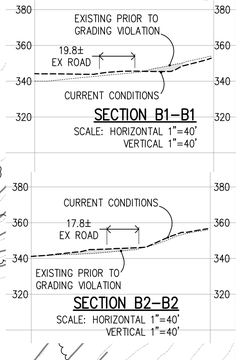

SECTION B1–B1
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

SECTION B2–B2
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

LEGEND
- FLOWLINE (CURRENT CONDITIONS)
- FLOWLINE (LIDAR)
- CONTOUR (CURRENT CONDITIONS) TOPOGRAPHY FROM SURVEY: JANUARY 29, 2020
- CONTOUR (LIDAR) SANTA CLARA COUNTY: 2016

NOTICE TO CONTRACTOR:
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PRELIMINARY PLANS
NOT FOR CONSTRUCTION

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PLAN # ____ SHEET ____ OF ____

REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1950
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3662
EMAIL: ENGINEERING@HANNABRUNETTI.COM

DATE: AUGUST 2022
HORIZ. SCALE: 1"=40'
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY: ____
DRAWN BY: T.M.

date: ____
Hanna — Brunetti

Amanda Joy Musy–Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEL
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Abatement Plan - Area B

Lands of Bourdet - Pacheco Pass Highway - apn 898-19-005 & 043

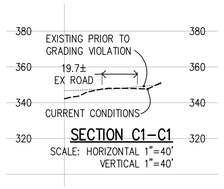
UNINCORPORATED
AUGUST 2022

SANTA CLARA COUNTY
CALIFORNIA

SHEET 5 OF 22

JOB NO. 18085

APPLICANT: BOURDET | ROAD: PACHECO PASS HIGHWAY | COUNTY FILE NO.: PLN20–139 | JOB NO. 18085



SECTION C1–C1
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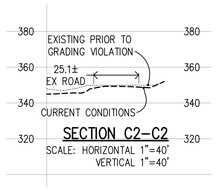

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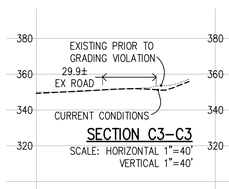

SECTION C3–C3
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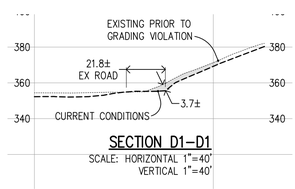

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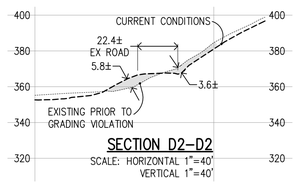

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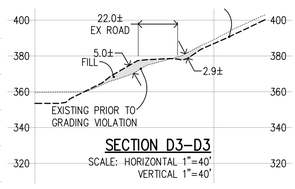

SECTION D3–D3
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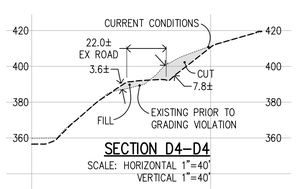
VERTICAL 1"=40'



SECTION D4–D4
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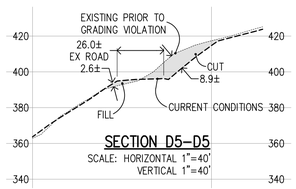

SECTION D5–D5
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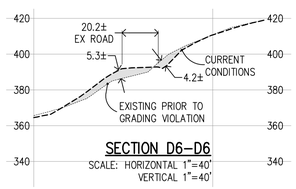

SECTION D6–D6
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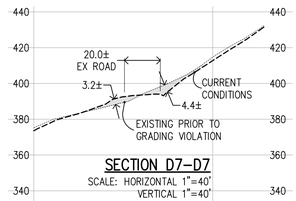
VERTICAL 1"=40'



SECTION D7–D7
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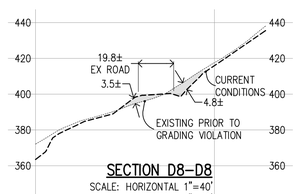
VERTICAL 1"=40'



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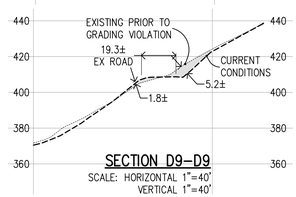
VERTICAL 1"=40'



SECTION D9–D9
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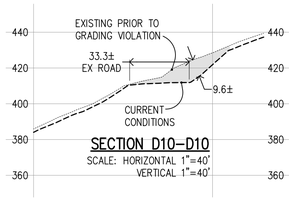
VERTICAL 1"=40'



SECTION D10–D10
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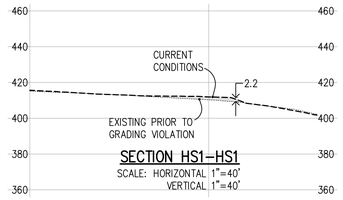
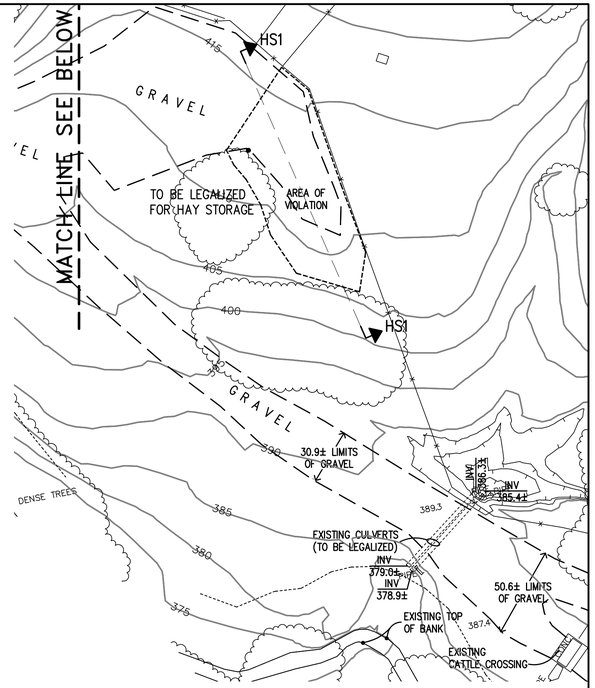
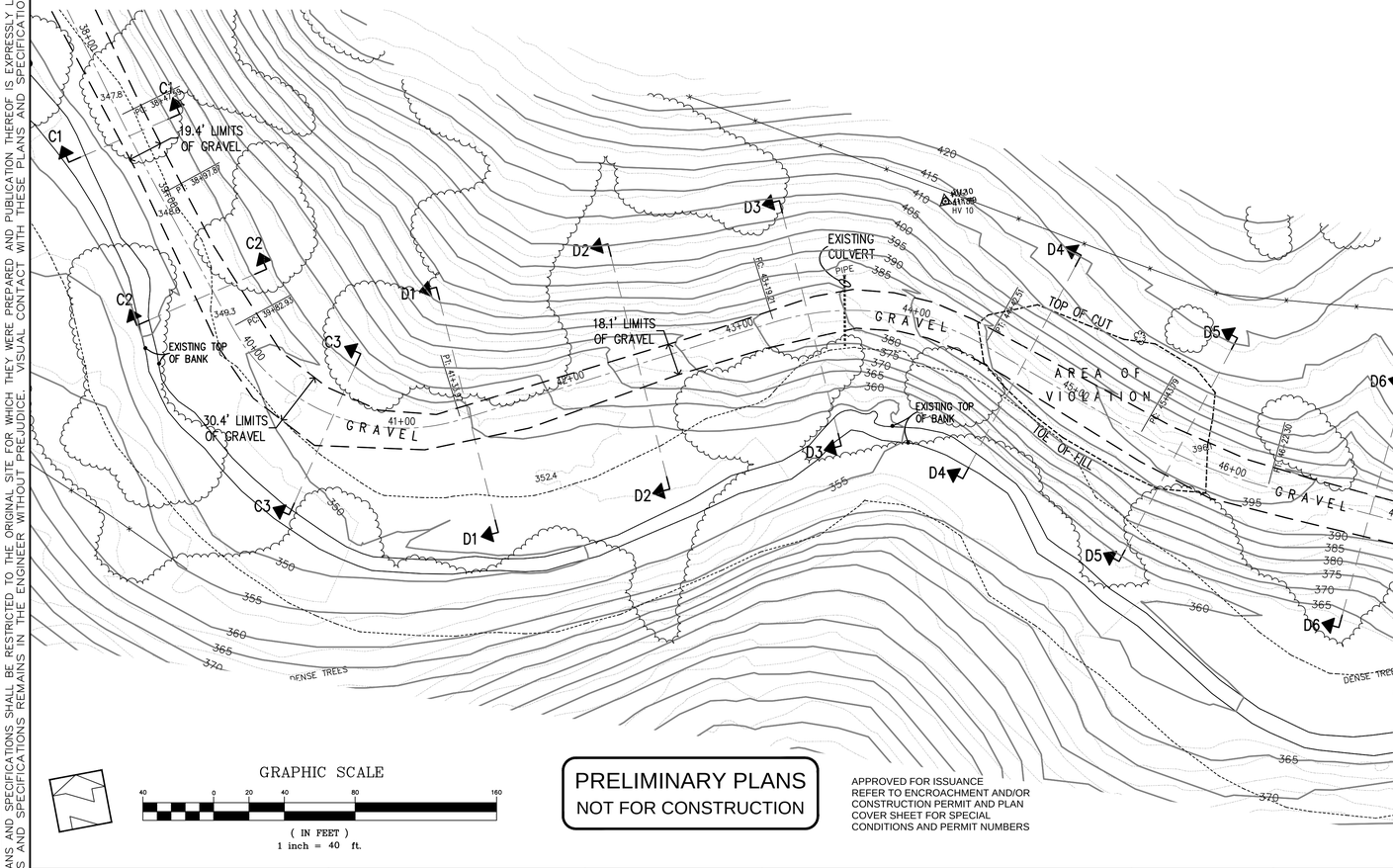
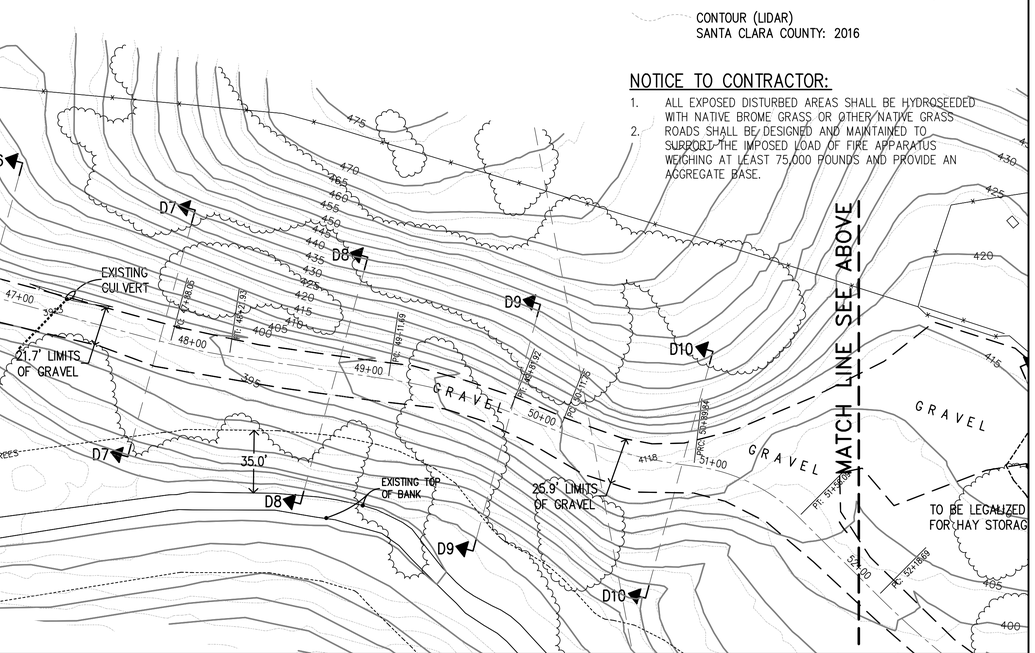
VERTICAL 1"=40'



SECTION HS1–HS1
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'







LEGEND

- FLOWLINE (CURRENT CONDITIONS)
- FLOWLINE (LIDAR)
- CONTOUR (CURRENT CONDITIONS) TOPOGRAPHY FROM SURVEY: JANUARY 29, 2020
- CONTOUR (LIDAR) SANTA CLARA COUNTY: 2016

NOTICE TO CONTRACTOR:

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GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PLAN # _____
SHEET _____ OF _____

REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST 1955
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3662
EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: AUGUST 2022
HORIZ. SCALE: 1"=40'
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY: _____
DRAWN BY: T.M.

date: Hanna – Brunetti

Amanda Joy Musy–Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEL
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Abatement Plan - Area C

Lands of Bourdet - Pacheco Pass Highway - apn 898-19-005 & 043

UNINCORPORATED AUGUST 2022

SANTA CLARA COUNTY CALIFORNIA

SHEET 5 OF 21

JOB NO. 18085

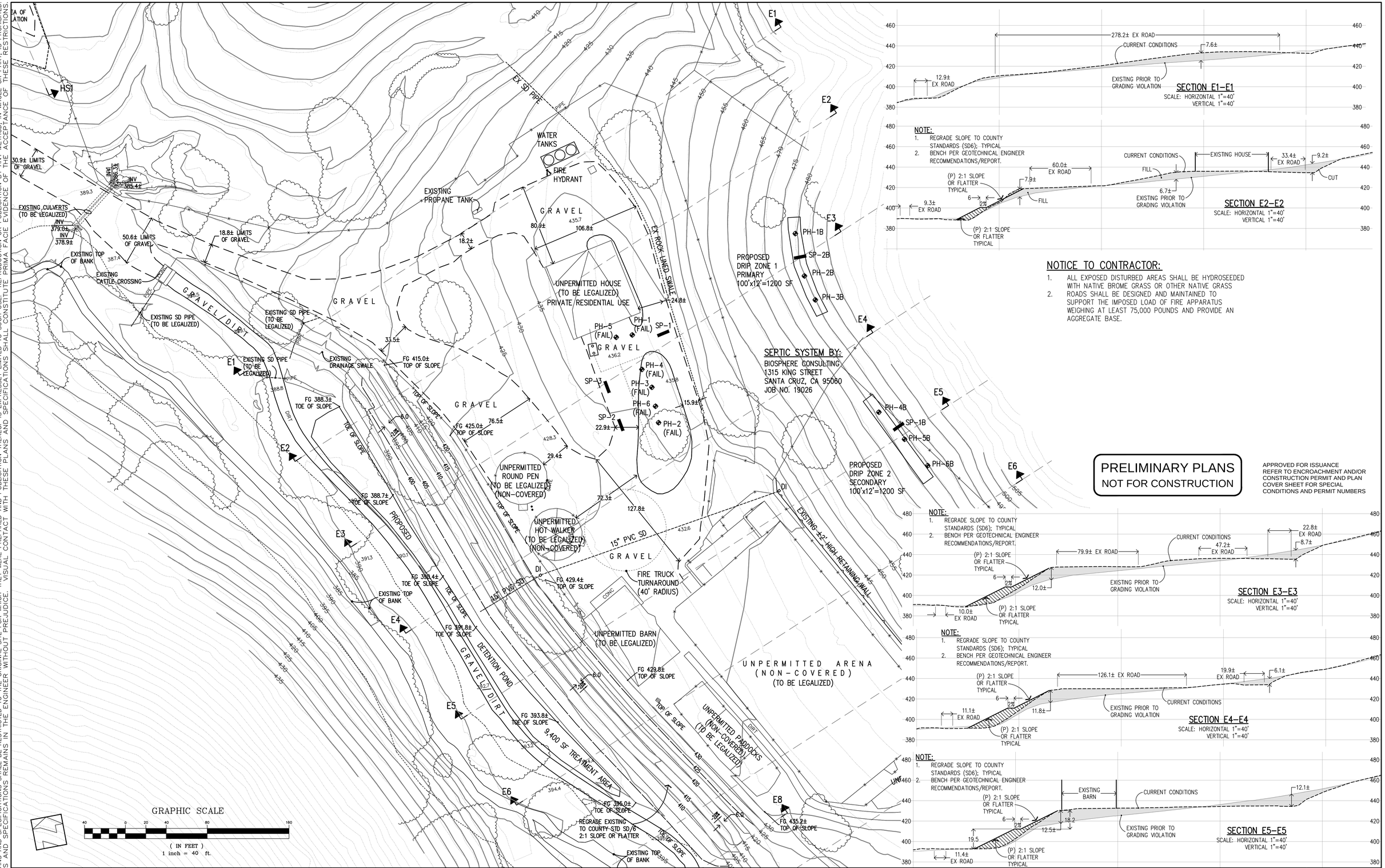
APPLICANT: BOURDET

ROAD: PACHECO PASS HIGHWAY

COUNTY FILE NO.: PLN20–139

JOB NO. 18085

PLAN # _____
SHEET _____ OF _____



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REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1933
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7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
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EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: AUGUST 2022
HORIZ. SCALE: 1"=40'
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY: _____
DRAWN BY: T.M.

date: Hanna – Brunetti

Amanda Joy Musy–Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEJ
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Abatement Plan - Area D

Lands of Bourdet - Pacheco Pass Highway - apn 898-19-005 & 043

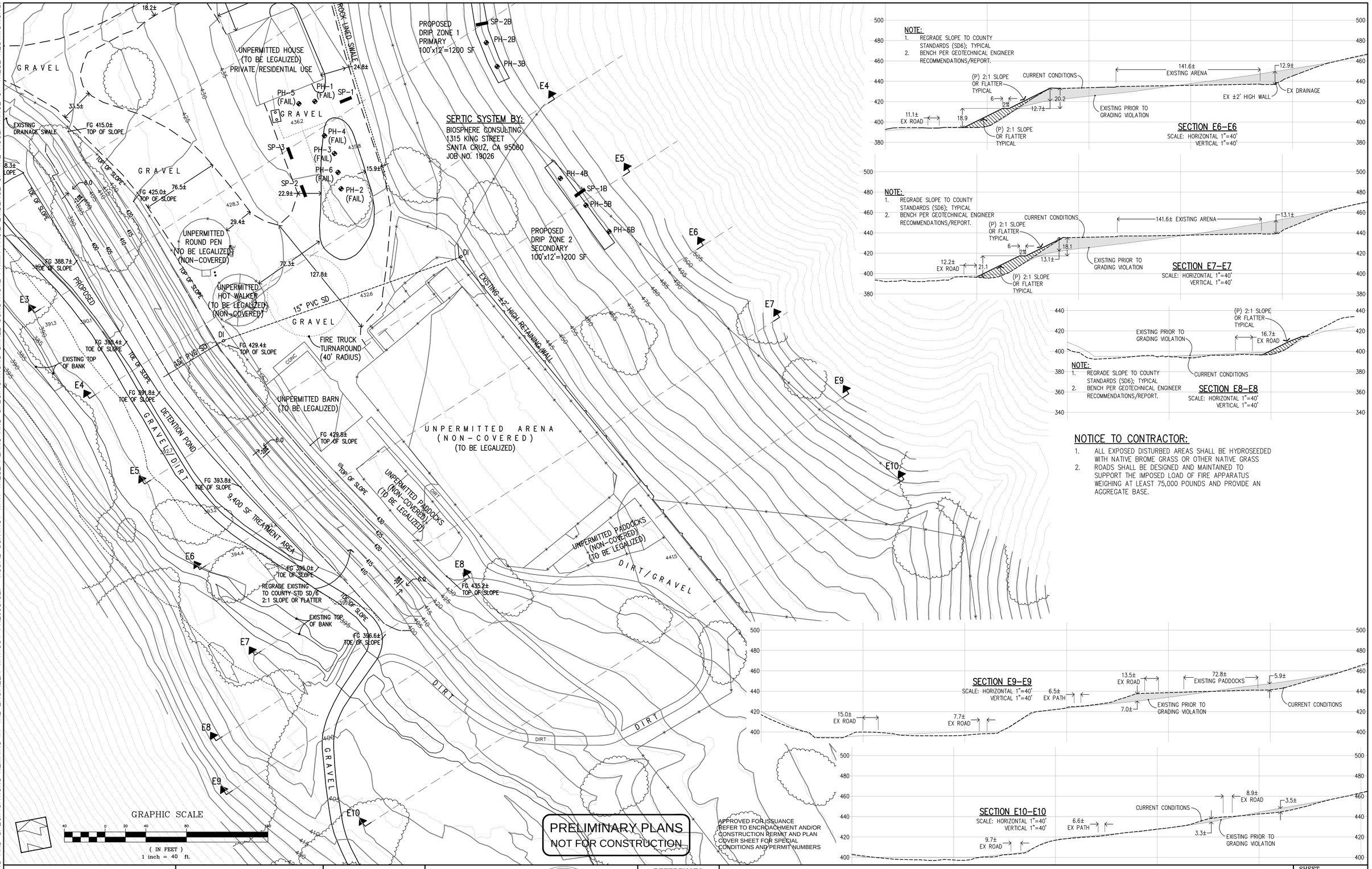
UNINCORPORATED
AUGUST 2022

SANTA CLARA COUNTY
CALIFORNIA

SHEET 7 OF 22

JOB NO. 18085

APPLICANT: BOURDET | ROAD: PACHECO PASS HIGHWAY | COUNTY FILE NO.: PLN20–139 | JOB NO. 18085



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(IN FEET)
1 inch = 40 ft.

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PLAN # _____
SHEET _____ OF _____

REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST 1935
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
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EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: AUGUST 2022
HORIZ. SCALE: 1"=40'
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY: _____
DRAWN BY: T.M.

date: Hanna – Brunetti

Amanda Joy Musy–Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEL
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Abatement Plan - Area D

Lands of Bourdet - Pacheco Pass Highway - apn 898-19-005 & 043

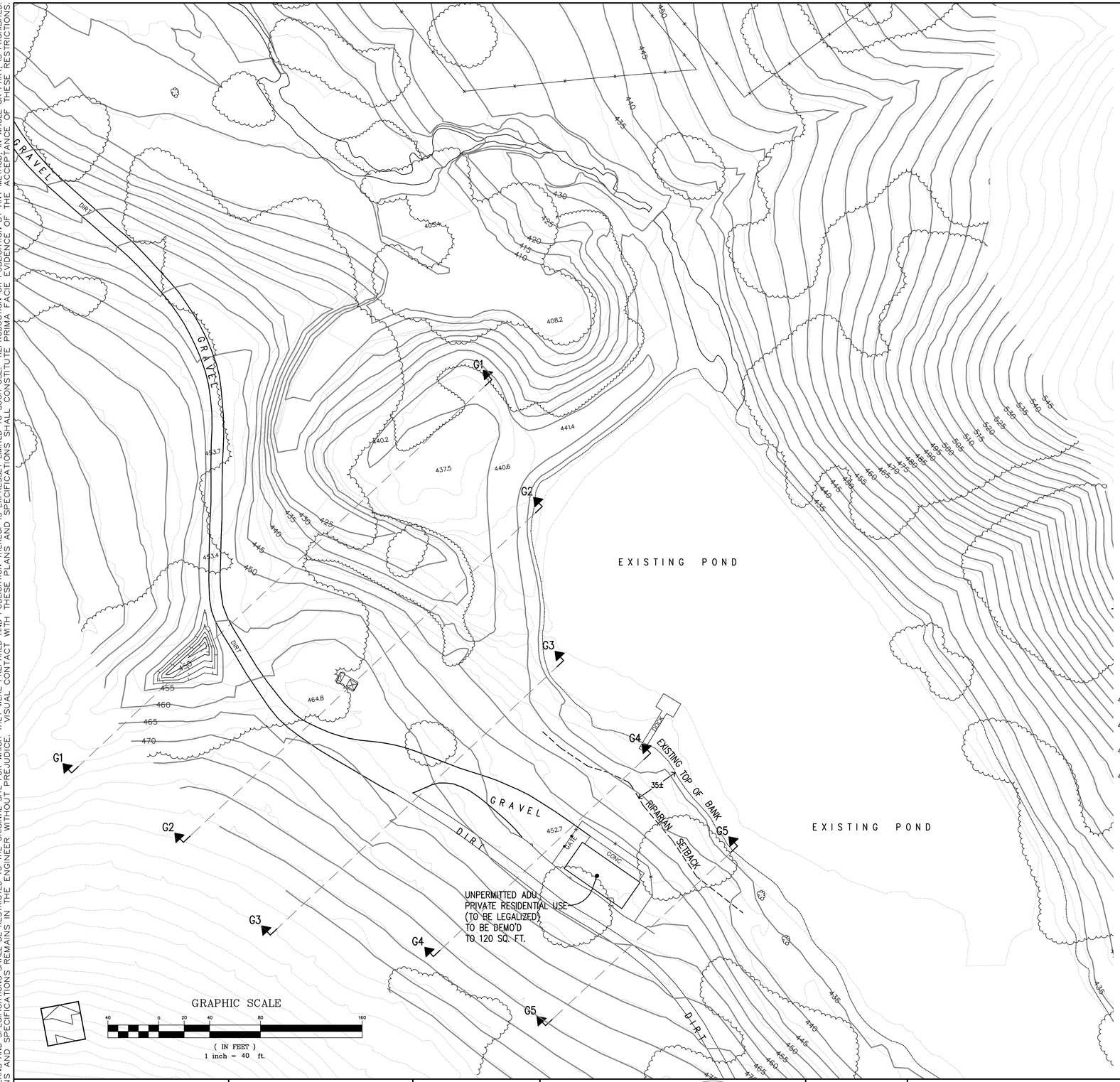
UNINCORPORATED
AUGUST 2022

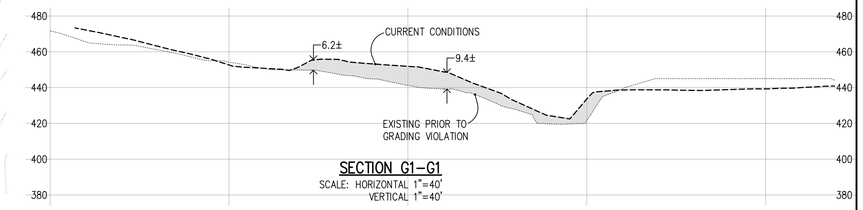
SANTA CLARA COUNTY
CALIFORNIA

SHEET 8 OF 22

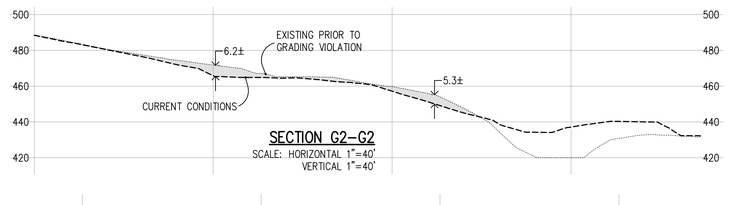
JOB NO. 18085

APPLICANT: BOURDET | ROAD: PACHECO PASS HIGHWAY | COUNTY FILE NO.: PLN20–139 | JOB NO. 18085





SECTION G1–G1
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



SECTION G2–G2
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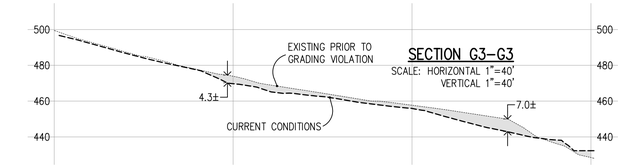
VERTICAL 1"=40'



SECTION G3–G3
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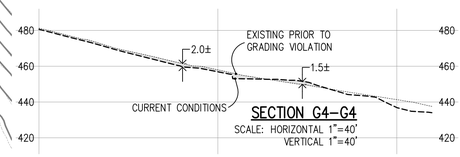
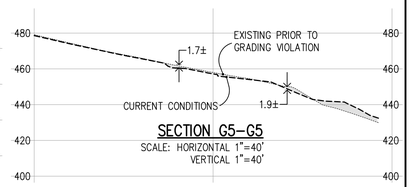
VERTICAL 1"=40'



SECTION G4–G4
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



SECTION G5–G5
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

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PRELIMINARY PLANS
NOT FOR CONSTRUCTION

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REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PLAN # _____
SHEET _____ OF _____

REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1950
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3662
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DATE: AUGUST 2022
HORIZ. SCALE: 1"=40'
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY: _____
DRAWN BY: T.M.

date: _____
Hanna – Brunetti

Amanda Joy Musy–Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEZ
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Abatement Plan - Area E

Lands of Bourdet - Pacheco Pass Highway - apn 898-19-005 & 043

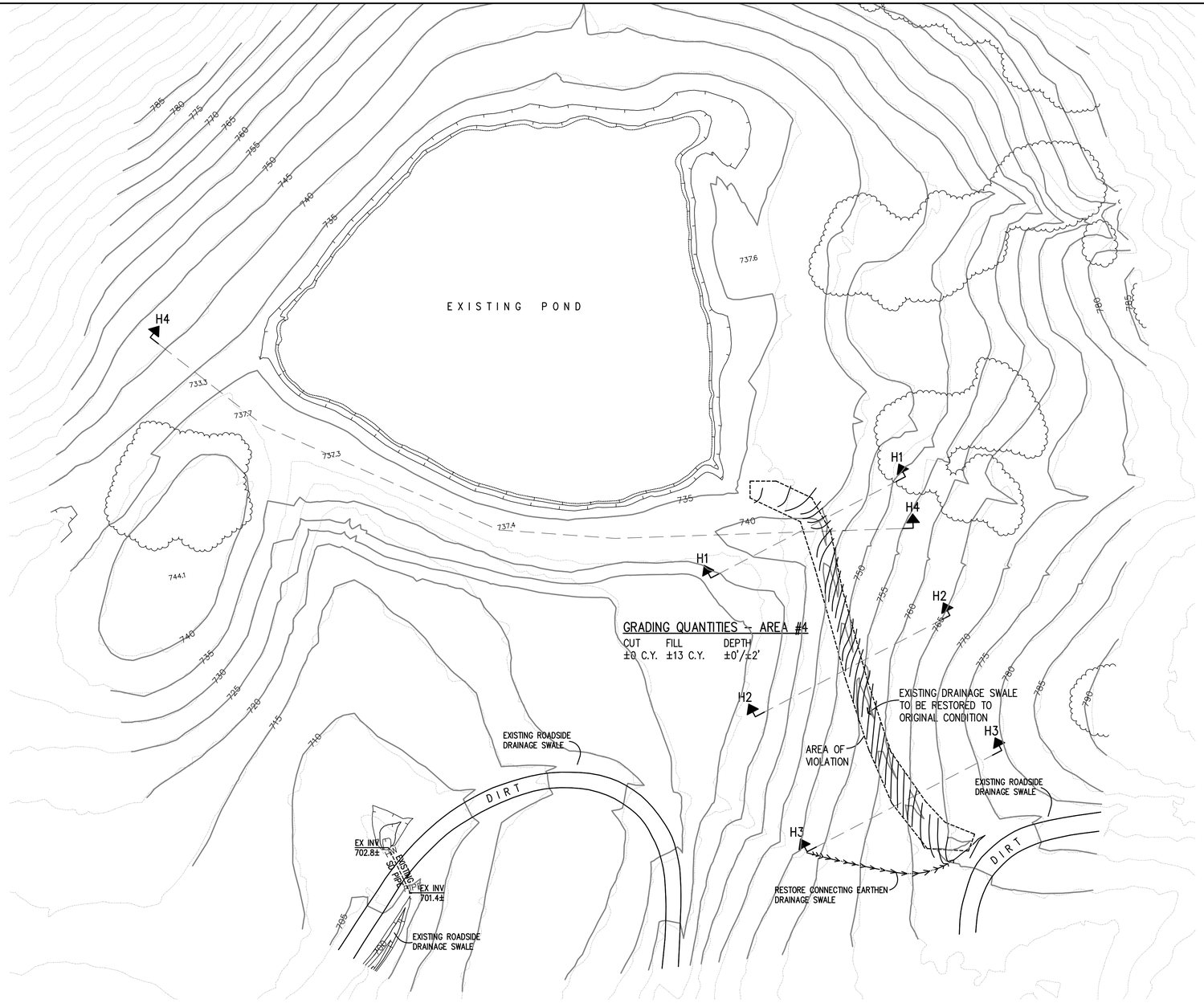
UNINCORPORATED
AUGUST 2022

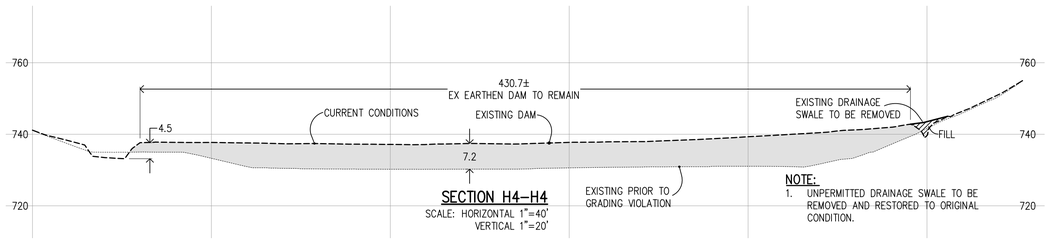
SANTA CLARA COUNTY
CALIFORNIA

SHEET 9 OF 22

JOB NO. 18085

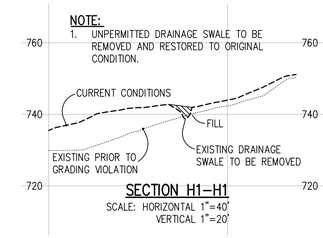
APPLICANT: BOURDET | ROAD: PACHECO PASS HIGHWAY | COUNTY FILE NO.: PLN20–139 | JOB NO. 18085





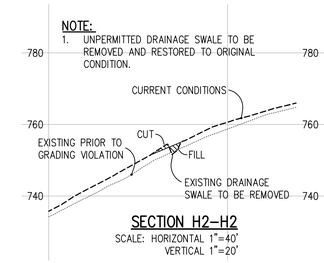
SECTION H4–H4
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=20'

NOTE:
1. UNPERMITTED DRAINAGE SWALE TO BE REMOVED AND RESTORED TO ORIGINAL CONDITION.



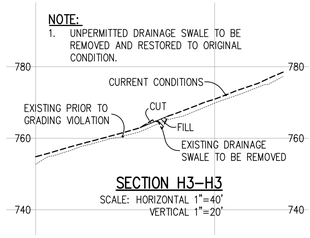
SECTION H1–H1
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=20'

NOTE:
1. UNPERMITTED DRAINAGE SWALE TO BE REMOVED AND RESTORED TO ORIGINAL CONDITION.



SECTION H2–H2
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=20'

NOTE:
1. UNPERMITTED DRAINAGE SWALE TO BE REMOVED AND RESTORED TO ORIGINAL CONDITION.



SECTION H3–H3
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=20'

NOTICE TO CONTRACTOR:

1. ALL EXPOSED DISTURBED AREAS SHALL BE HYDROSEEDED WITH NATIVE BROME GRASS OR OTHER NATIVE GRASS

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PLAN # ____ OF ____
SHEET ____

REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1932
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3662
EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: AUGUST 2022
HORIZ. SCALE: 1"=40'
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY: ____
DRAWN BY: T.M.

date: Hanna – Brunetti

Amanda Joy Musy–Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEL
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Abatement Plan - Area #4

Lands of Bourdet - Pacheco Pass Highway - apn 898-19-005 & 043

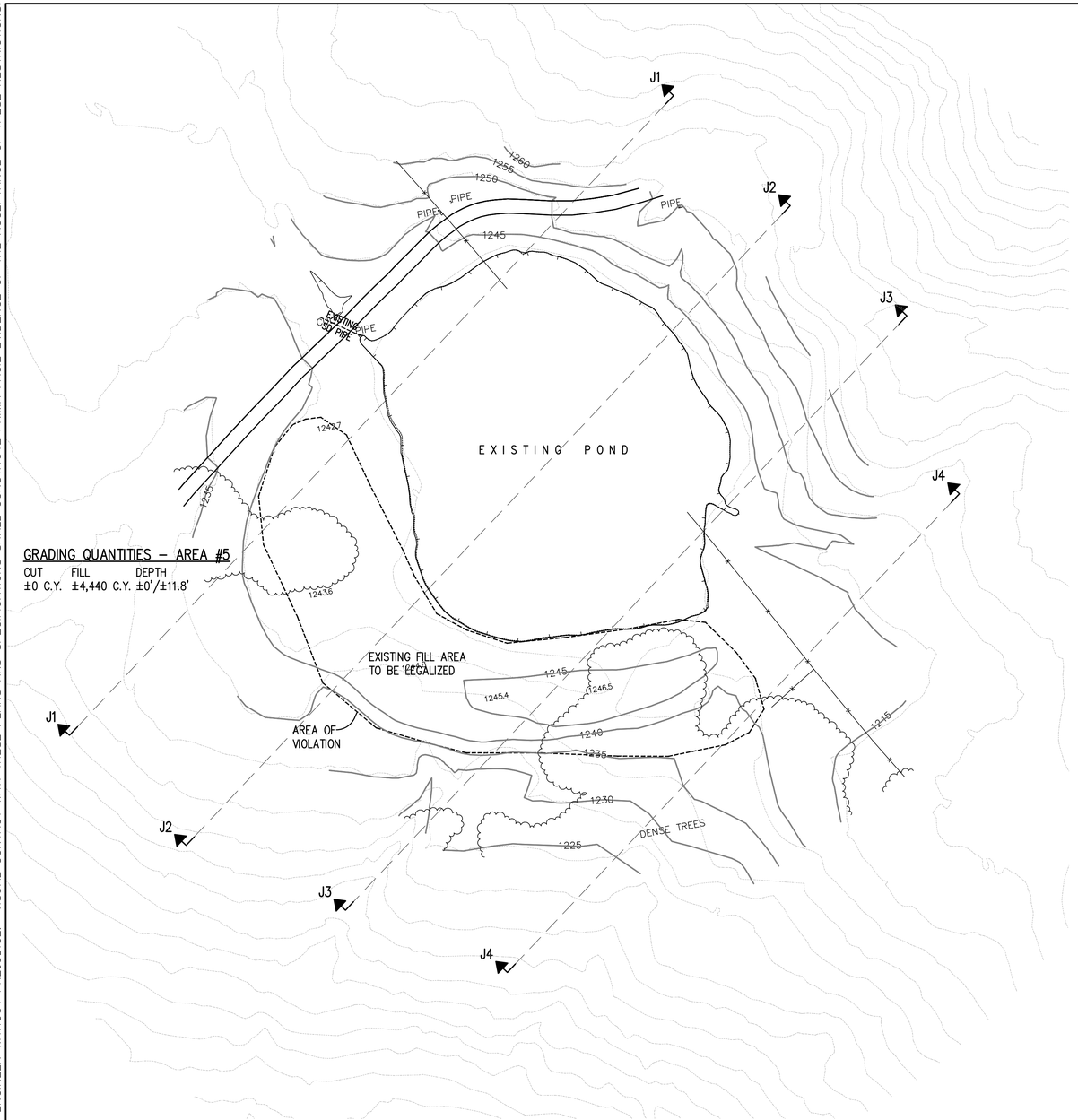
UNINCORPORATED
AUGUST 2022

SANTA CLARA COUNTY
CALIFORNIA

SHEET 10 OF 22

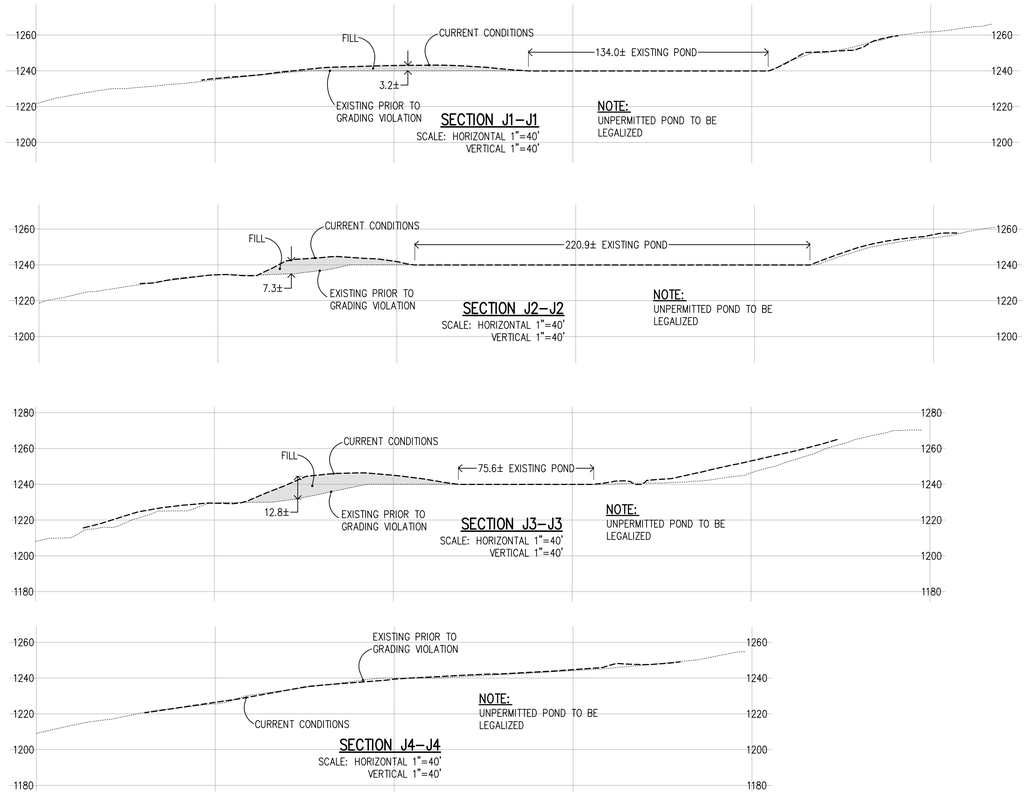
JOB NO. 18085

APPLICANT: BOURDET | ROAD: PACHECO PASS HIGHWAY | COUNTY FILE NO.: PLN20–139 | JOB NO. 18085



GRADING QUANTITIES – AREA #5

CUT	FILL	DEPTH
±0 C.Y.	±4,440 C.Y.	±0'/±11.8'



NOTICE TO CONTRACTOR:

1. ALL EXPOSED DISTURBED AREAS SHALL BE HYDROSEEDED WITH NATIVE BROME GRASS OR OTHER NATIVE GRASS

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PLAN # _____
SHEET _____ OF _____

REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1920
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3662
EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: AUGUST 2022
HORIZ. SCALE: 1"=40'
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY: _____
DRAWN BY: T.M.

date: _____
Hanna – Brunetti

Amanda Joy Musy–Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEZ
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Abatement Plan - Area #5

Lands of Bourdet - Pacheco Pass Highway - apn 898-19-005 & 043

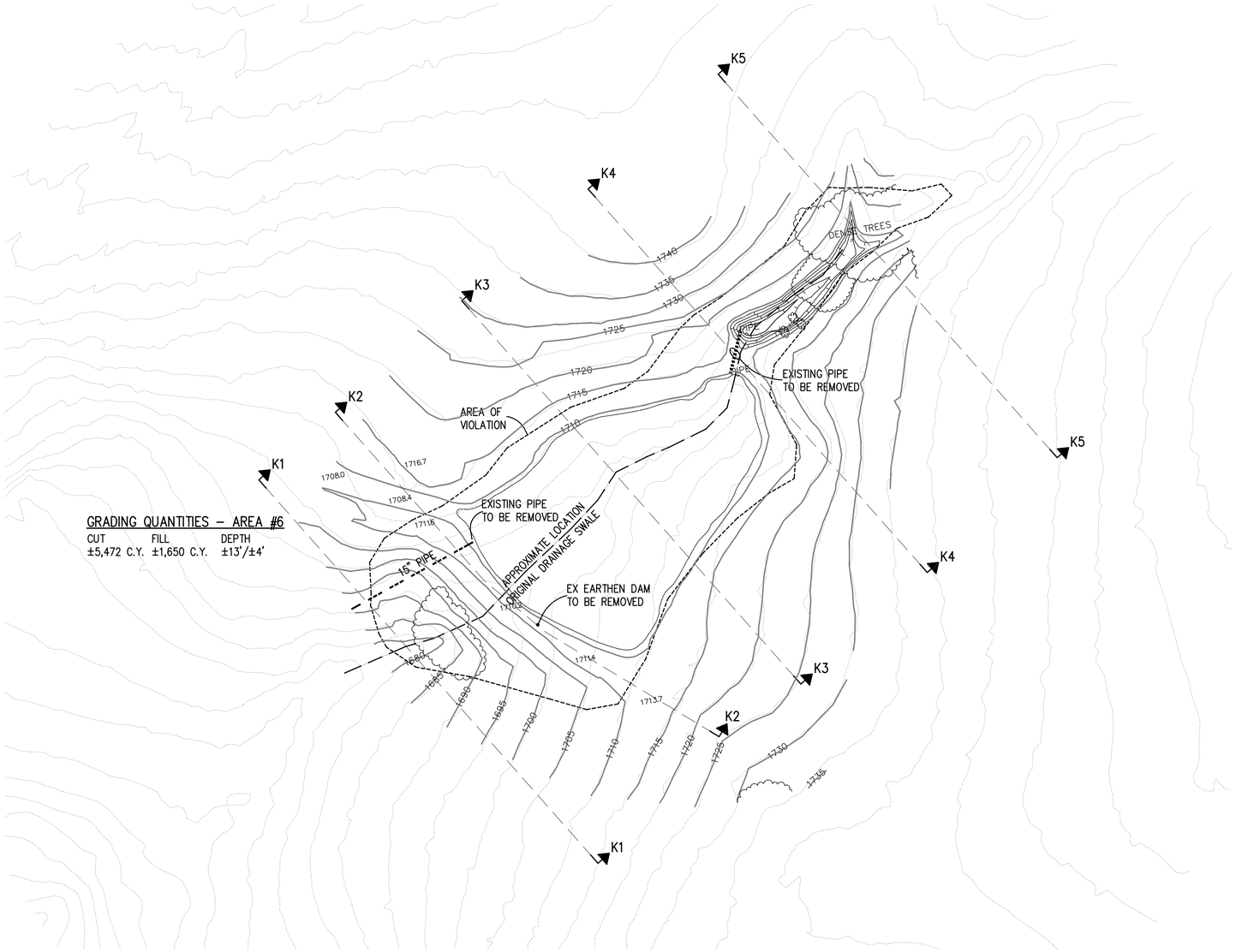
UNINCORPORATED
AUGUST 2022

SANTA CLARA COUNTY
CALIFORNIA

SHEET 11 OF 22

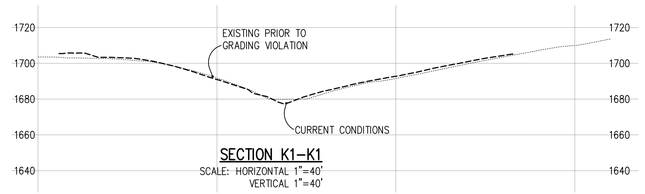
JOB NO. 18085

APPLICANT: BOURDET | ROAD: PACHECO PASS HIGHWAY | COUNTY FILE NO.: PLN20–139 | JOB NO. 18085

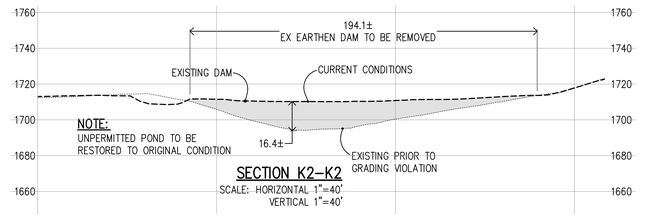


GRADING QUANTITIES – AREA #6

CUT	FILL	DEPTH
±5,472 C.Y.	±1,650 C.Y.	±13'/±4'

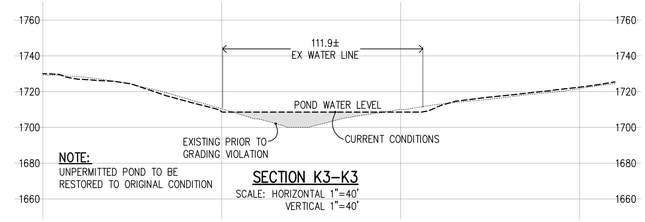


SECTION K1–K1
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



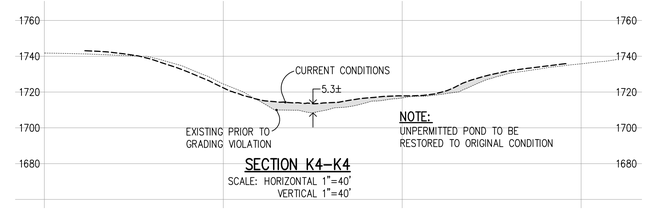
NOTE:
UNPERMITTED POND TO BE RESTORED TO ORIGINAL CONDITION

SECTION K2–K2
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

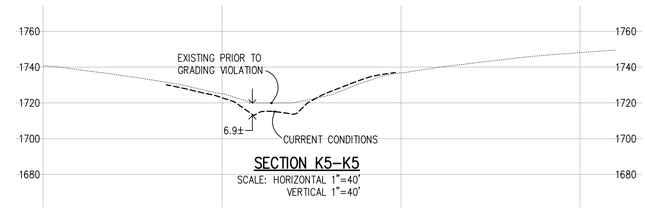


NOTE:
UNPERMITTED POND TO BE RESTORED TO ORIGINAL CONDITION

SECTION K3–K3
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



SECTION K4–K4
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



SECTION K5–K5
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

NOTICE TO CONTRACTOR:

1. ALL EXPOSED DISTURBED AREAS SHALL BE HYDROSEEDED WITH NATIVE BROME GRASS OR OTHER NATIVE GRASS

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PLAN # ____ OF ____
SHEET ____

REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1910
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3662
EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: AUGUST 2022
HORIZ. SCALE: 1"=40'
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY: ____
DRAWN BY: T.M.

date: ____
Hanna – Brunetti

Amanda Joy Musy–Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEZ
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Abatement Plan - Area #6

Lands of Bourdet - Pacheco Pass Highway - apn 898-19-005 & 043

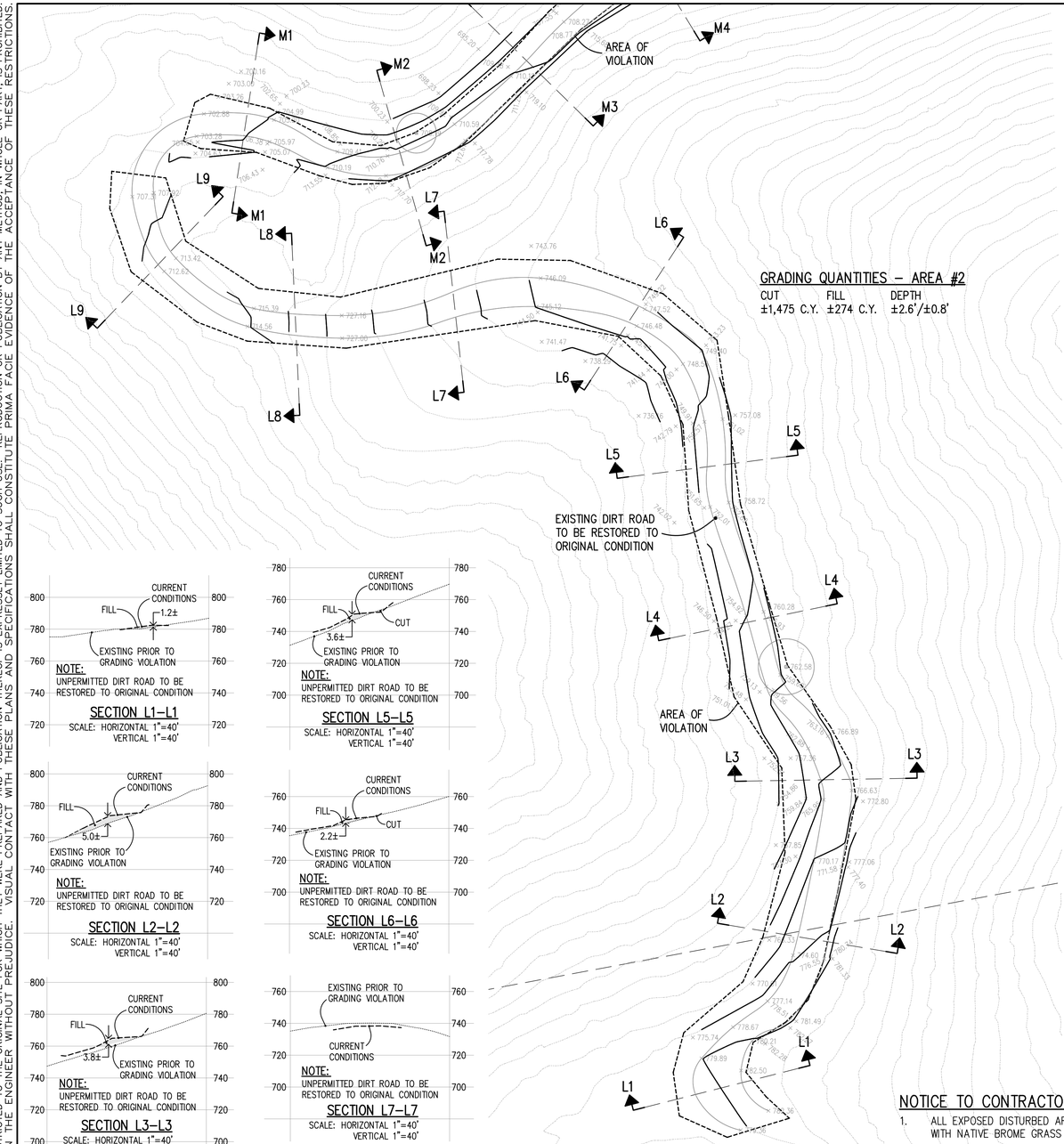
UNINCORPORATED
AUGUST 2022

SANTA CLARA COUNTY
CALIFORNIA

SHEET 12 OF 22

JOB NO. 18085

APPLICANT: BOURDET | ROAD: PACHECO PASS HIGHWAY | COUNTY FILE NO.: PLN20–139 | JOB NO. 18085



GRADING QUANTITIES – AREA #2

CUT	FILL	DEPTH
±1,475 C.Y.	±274 C.Y.	±2.6'/±0.8'

NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

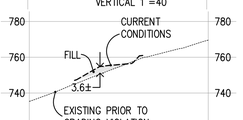
SECTION L1–L1
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

SECTION L2–L2
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

SECTION L3–L3
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

SECTION L4–L4
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

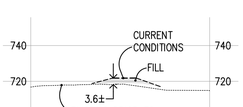
SECTION L5–L5
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

SECTION L6–L6
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

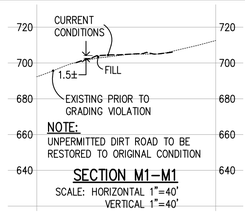
NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

SECTION L7–L7
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



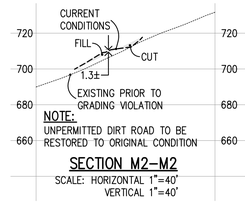
NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

SECTION L8–L8
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



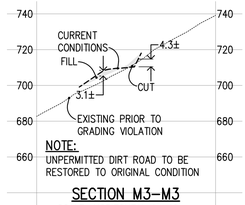
NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

SECTION M1–M1
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



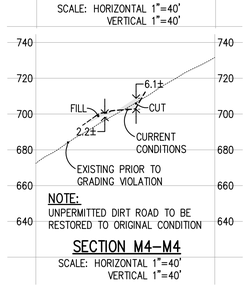
NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

SECTION M2–M2
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



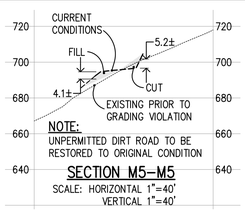
NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

SECTION M3–M3
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



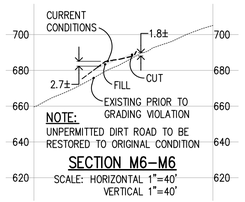
NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

SECTION M4–M4
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



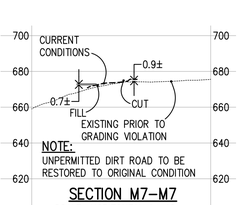
NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

SECTION M5–M5
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

SECTION M6–M6
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

SECTION M7–M7
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

NOTICE TO CONTRACTOR:

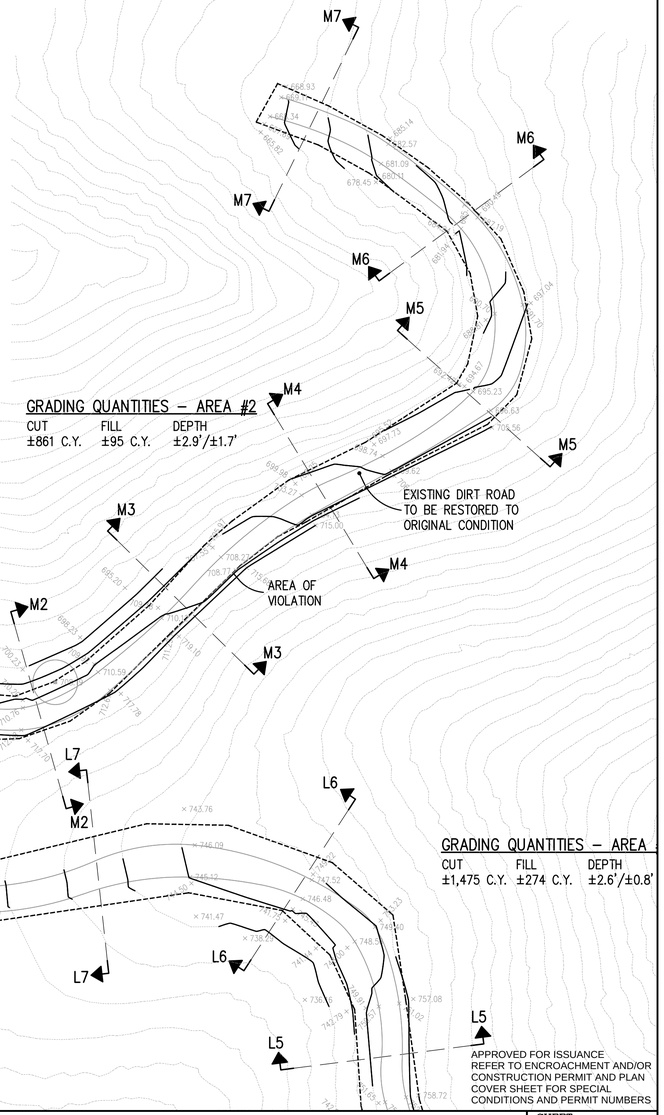
1. ALL EXPOSED DISTURBED AREAS SHALL BE HYDROSEEDED WITH NATIVE BROME GRASS OR OTHER NATIVE GRASS

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

PRELIMINARY PLANS
NOT FOR CONSTRUCTION



GRADING QUANTITIES – AREA #2

CUT	FILL	DEPTH
±861 C.Y.	±95 C.Y.	±2.9'/±1.7'

GRADING QUANTITIES – AREA

CUT	FILL	DEPTH
±1,475 C.Y.	±274 C.Y.	±2.6'/±0.8'

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PLAN # _____
SHEET _____ OF _____

REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1959
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3662
EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: AUGUST 2022
HORIZ. SCALE: 1"=40'
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY: _____
DRAWN BY: T.M.

date: _____
Hanna – Brunetti

Amanda Joy Musy–Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEZ
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Abatement Plan - Area #2

Lands of Bourdet - Pacheco Pass Highway - apn 898-19-005 & 043

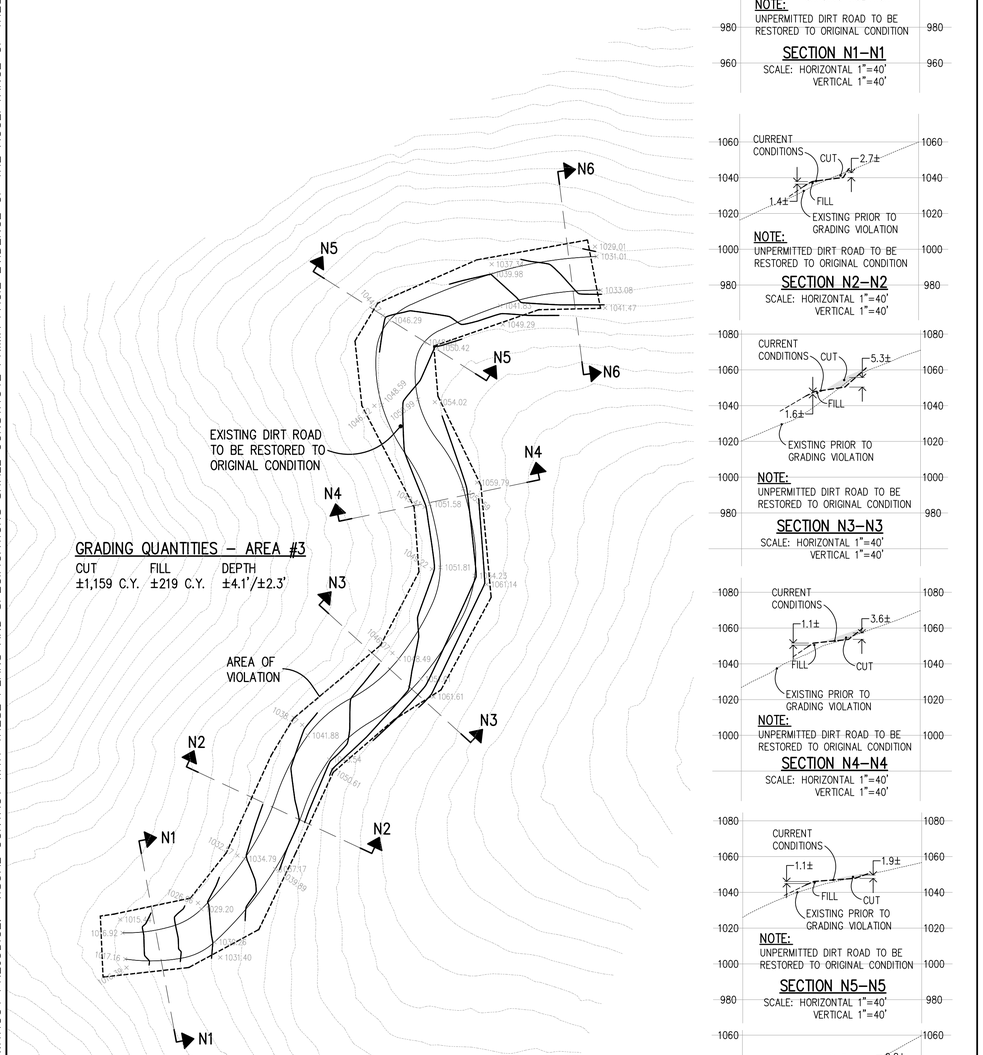
UNINCORPORATED
AUGUST 2022

SANTA CLARA COUNTY
CALIFORNIA

SHEET 13 OF 22

JOB NO. 18085

APPLICANT: BOURDET | ROAD: PACHECO PASS HIGHWAY | COUNTY FILE NO.: PLN20–139 | JOB NO. 18085



GRADING QUANTITIES – AREA #3

CUT	FILL	DEPTH
±1,159 C.Y.	±219 C.Y.	±4.1'/±2.3'

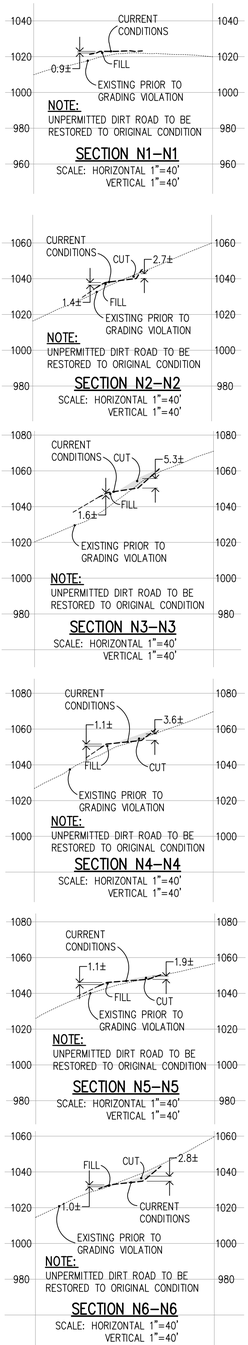
Area #3

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

1 inch = 40 ft.



NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

SECTION N1–N1
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

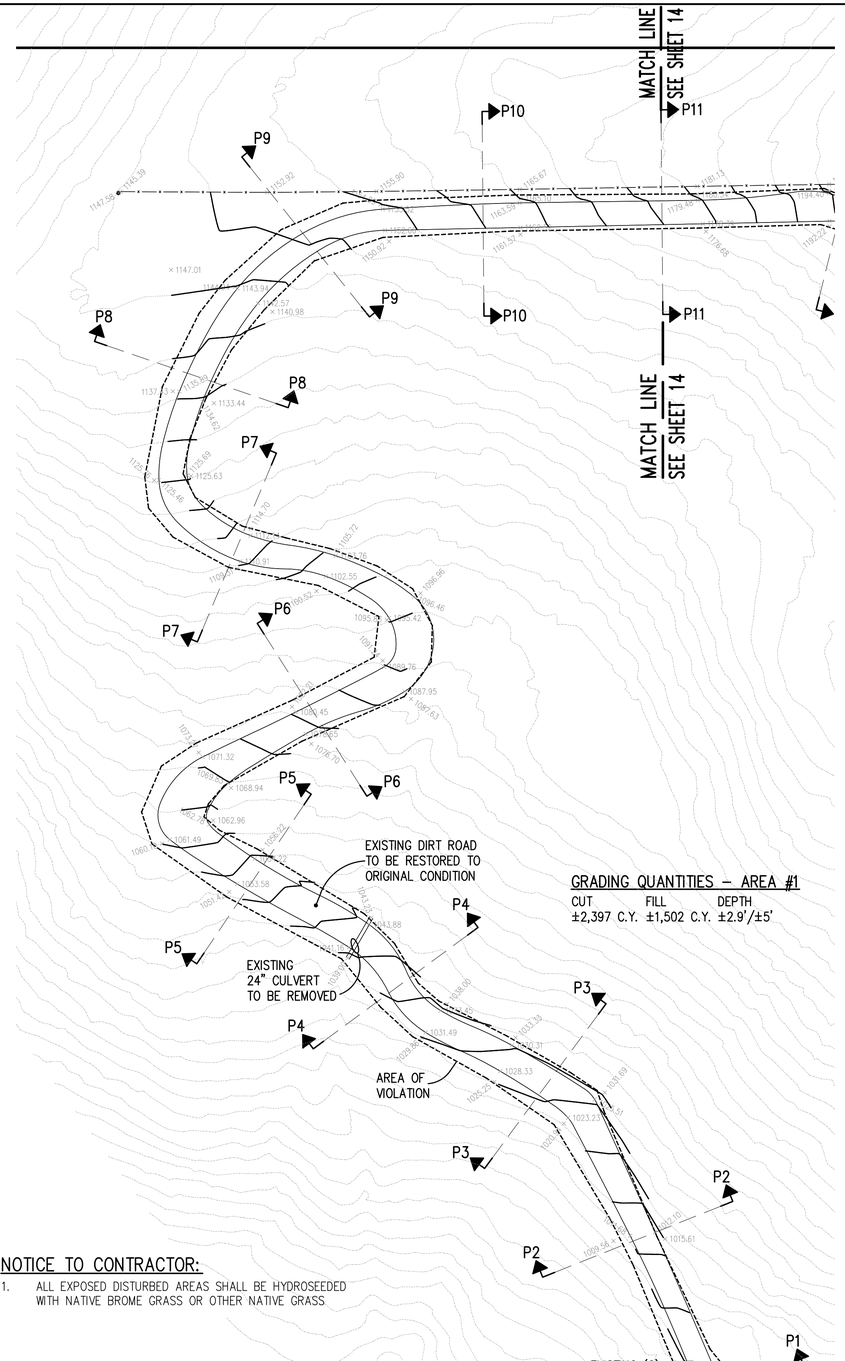
SECTION N2–N2
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

SECTION N3–N3
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

SECTION N4–N4
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

SECTION N5–N5
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

SECTION N6–N6
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



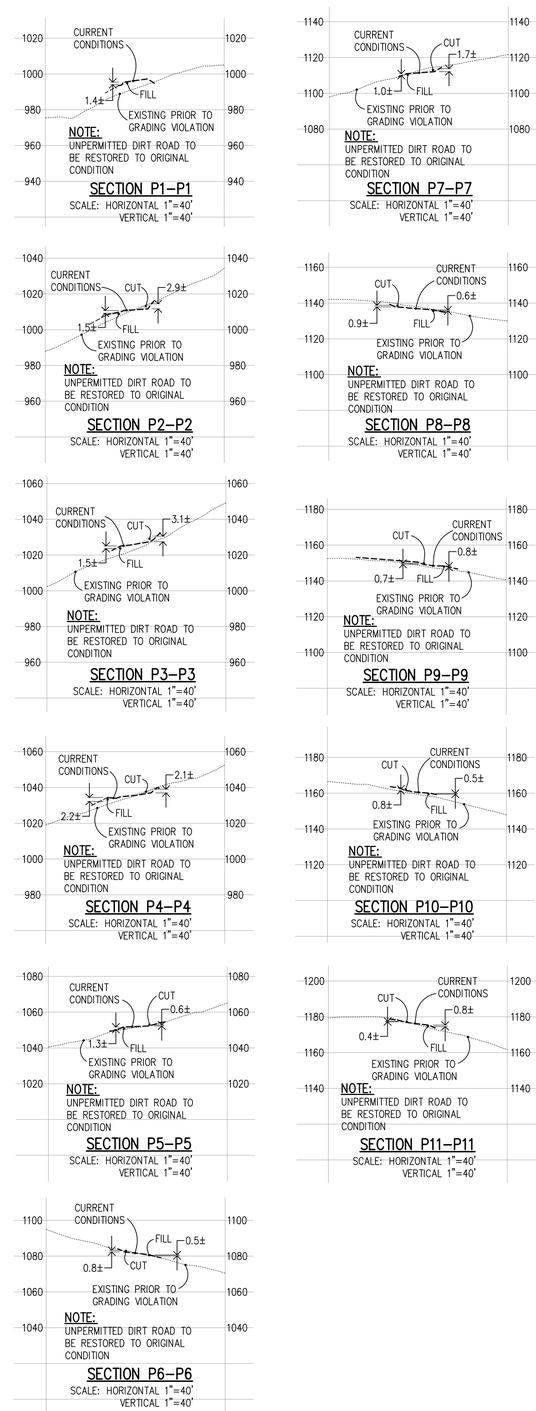
GRADING QUANTITIES – AREA #1

CUT	FILL	DEPTH
±2,397 C.Y.	±1,502 C.Y.	±2.9'/±5'

Area #1

NOTICE TO CONTRACTOR:

1. ALL EXPOSED DISTURBED AREAS SHALL BE HYDROSEEDED WITH NATIVE BROME GRASS OR OTHER NATIVE GRASS



NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

SECTION P1–P1
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

SECTION P2–P2
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

SECTION P3–P3
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

SECTION P4–P4
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

SECTION P5–P5
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

SECTION P6–P6
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

SECTION P7–P7
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

SECTION P8–P8
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

SECTION P9–P9
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

SECTION P10–P10
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

SECTION P11–P11
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PLAN # _____
SHEET _____ OF _____

REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1920
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3662
EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: AUGUST 2022
HORIZ. SCALE: 1"=40'
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY: _____
DRAWN BY: T.M.

date: _____
Hanna – Brunetti

Amanda Joy Musy–Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEZ
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Abatement Plan - Area #1 & #3

Lands of Bourdet - Pacheco Pass Highway - apn 898-19-005 & 043

UNINCORPORATED
AUGUST 2022

SANTA CLARA COUNTY
CALIFORNIA

SHEET 14 OF 22

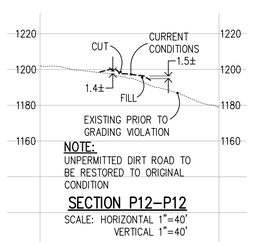
JOB NO. 18085

APPLICANT: BOURDET

ROAD: PACHECO PASS HIGHWAY

COUNTY FILE NO.: PLN20–139

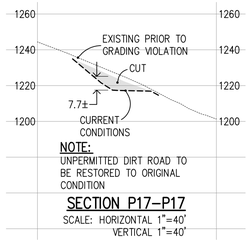
JOB NO. 18085



NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

SECTION P12–P12

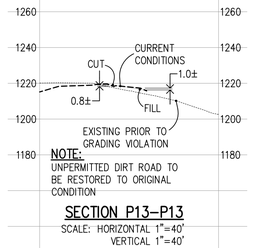
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

SECTION P17–P17

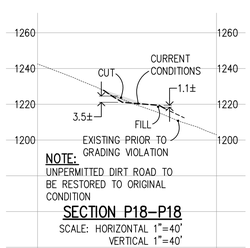
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

SECTION P13–P13

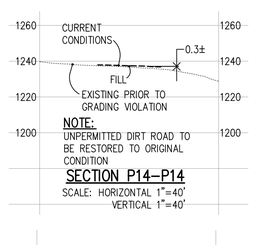
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

SECTION P18–P18

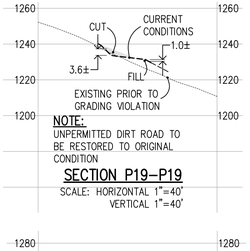
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

SECTION P14–P14

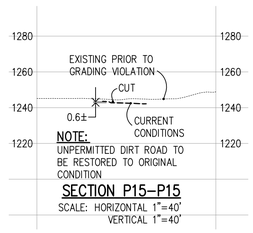
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

SECTION P19–P19

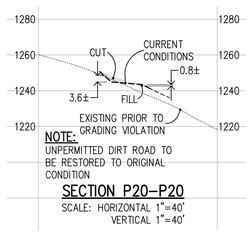
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

SECTION P15–P15

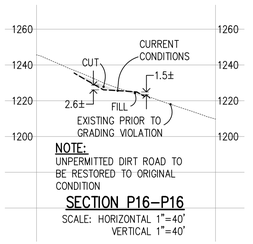
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

SECTION P20–P20

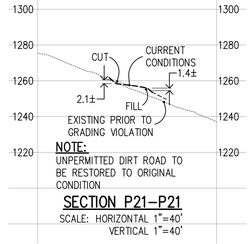
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

SECTION P16–P16

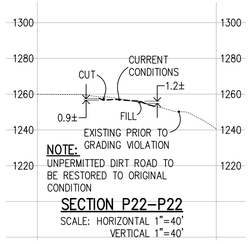
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

SECTION P21–P21

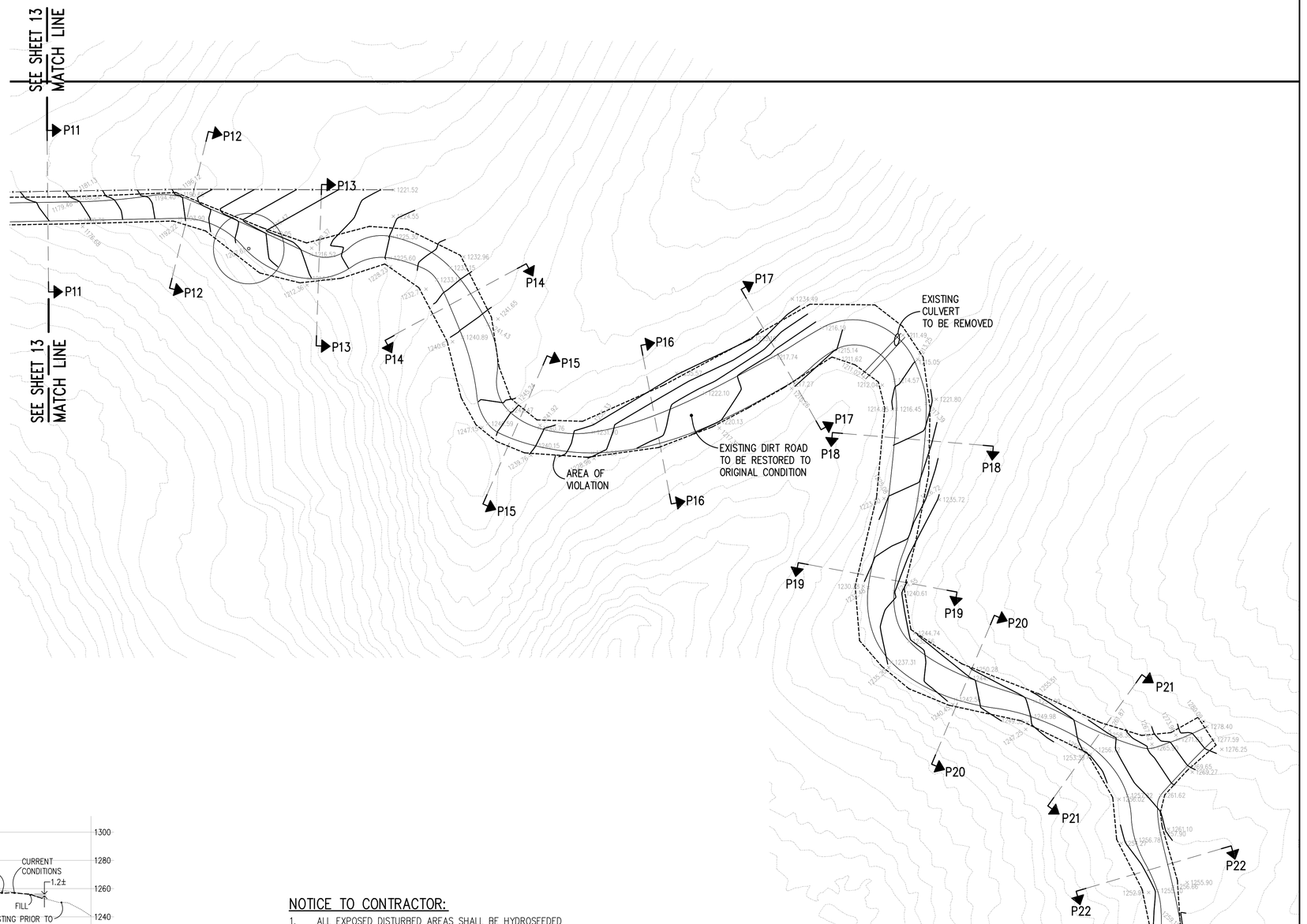
SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



NOTE: UNPERMITTED DIRT ROAD TO BE RESTORED TO ORIGINAL CONDITION

SECTION P22–P22

SCALE: HORIZONTAL 1"=40'
VERTICAL 1"=40'



GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

NOTICE TO CONTRACTOR:

1. ALL EXPOSED DISTURBED AREAS SHALL BE HYDROSEEDED WITH NATIVE BROME GRASS OR OTHER NATIVE GRASS

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PLAN # _____
SHEET _____ OF _____

REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1955
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3662
EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: AUGUST 2022
HORIZ. SCALE: 1"=40'
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY: _____
DRAWN BY: T.M.

date: _____
Hanna – Brunetti

Amanda Joy Musy–Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEL
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Abatement Plan - Area #1

Lands of Bourdet - Pacheco Pass Highway - apn 898-19-005 & 043

UNINCORPORATED
AUGUST 2022

SANTA CLARA COUNTY
CALIFORNIA

SHEET 15 OF 22

JOB NO. 18085

APPLICANT: BOURDET

ROAD: PACHECO PASS HIGHWAY

COUNTY FILE NO.: PLN20–139

JOB NO. 18085

PACHECO PASS HIGHWAY

15.8±

4±35± TURNOUT CONFORM TO COUNTY STDS

30.0±

23.0±

8±35± TURNOUT CONFORM TO COUNTY STDS

EXISTING BASEROCK DRIVEWAY; TYPICAL

12±35± TURNOUT CONFORM TO COUNTY STDS

FLOODPLAIN BOUNDARY

FLOODPLAIN BOUNDARY ZONE D

ZONE A

22.7±

16±35± TURNOUT CONFORM TO COUNTY STDS

EXISTING PIPE

20.7±

20±35± TURNOUT CONFORM TO COUNTY STDS

EXISTING BASEROCK DRIVEWAY; TYPICAL

19.4±

24±35± TURNOUT CONFORM TO COUNTY STDS

FIRE TRUCK TURNAROUND AREA (40' RADIUS)

27±60± TURNOUT CONFORM TO COUNTY STDS

EXISTING BASEROCK DRIVEWAY; TYPICAL

31±60± TURNOUT CONFORM TO COUNTY STDS

MATCH LINE STA 32+00 SEE SHEET 16

ZONE D

ZONE A

ZONE D

FLOODPLAIN BOUNDARY

EXISTING PIPE

35±60± TURNOUT CONFORM TO COUNTY STDS

EXISTING BASEROCK DRIVEWAY; TYPICAL

ROAD DITCH

1995.80

1079 ▲314.49 BK@HV4

1108 ▲330.94 FD 1.25IPT

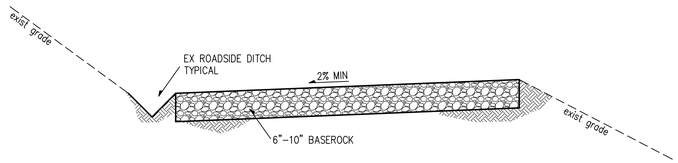
1100 ▲343.11

1113 ▲378.73 HV 5

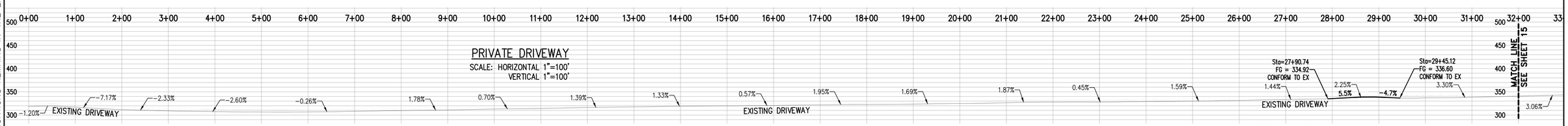
1114 ▲410.89 HV 11

NOTICE TO CONTRACTOR:

1. ALL EXPOSED DISTURBED AREAS SHALL BE HYDROSEEDED WITH NATIVE BROME GRASS OR OTHER NATIVE GRASS
2. ROADS SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOAD OF FIRE APPARATUS WEIGHING AT LEAST 75,000 POUNDS AND PROVIDE AN AGGREGATE BASE.



TYPICAL PRIVATE DRIVEWAY
NO SCALE



PRELIMINARY PLANS
NOT FOR CONSTRUCTION

GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)
1 inch = 100 ft.

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PLAN # ____ OF ____
SHEET ____

REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI EST. 1910
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3662
EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: AUGUST 2022
HORIZ. SCALE: 1"=100'
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY: ____
DRAWN BY: T.M.

date: ____22
Hanna – Brunetti

Amanda Joy Musy–Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEL
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Plan & Profile - Driveway

Lands of Bourdet - Pacheco Pass Highway - apn 898-19-005 & 043

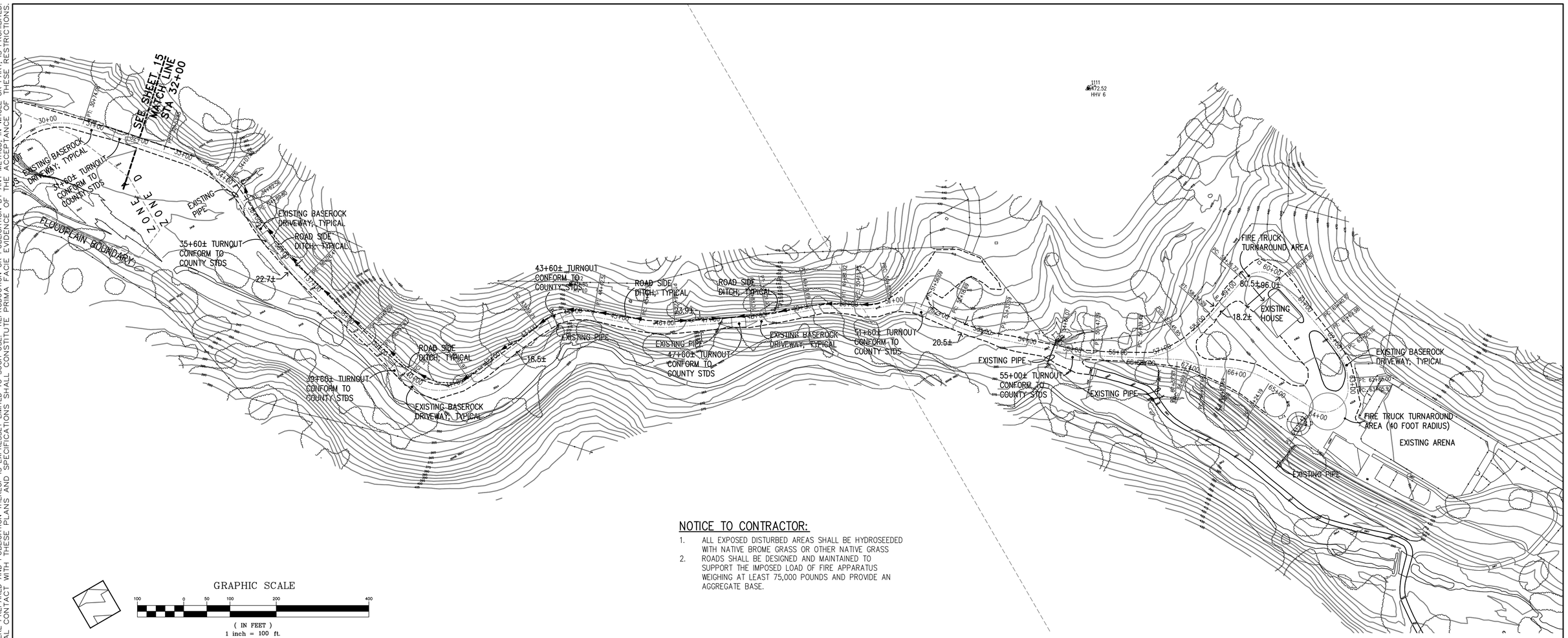
UNINCORPORATED
AUGUST 2022

SANTA CLARA COUNTY
CALIFORNIA

SHEET 16 OF 22

JOB NO. 18085

APPLICANT: BOURDET | ROAD: PACHECO PASS HIGHWAY | COUNTY FILE NO.: PLN20–139 | JOB NO. 18085



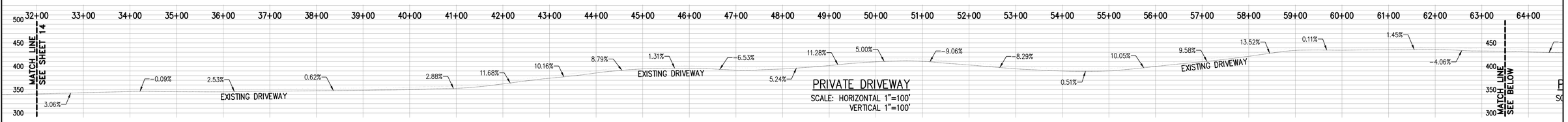
NOTICE TO CONTRACTOR:

1. ALL EXPOSED DISTURBED AREAS SHALL BE HYDROSEEDED WITH NATIVE BROME GRASS OR OTHER NATIVE GRASS
2. ROADS SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOAD OF FIRE APPARATUS WEIGHING AT LEAST 75,000 POUNDS AND PROVIDE AN AGGREGATE BASE.

GRAPHIC SCALE

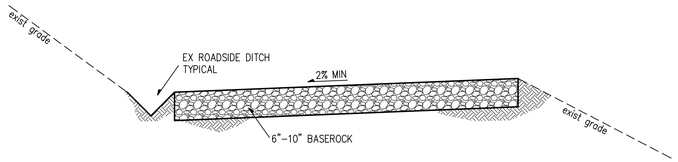
100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.



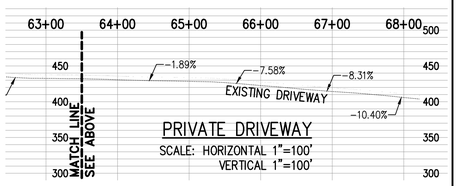
PRIVATE DRIVEWAY

SCALE: HORIZONTAL 1"=100'
VERTICAL 1"=100'



TYPICAL PRIVATE DRIVEWAY

NO SCALE



PRIVATE DRIVEWAY

SCALE: HORIZONTAL 1"=100'
VERTICAL 1"=100'

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PLAN # _____
SHEET ____ OF ____

REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1920
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
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DESIGNED BY: AM
CHECKED BY: ____
DRAWN BY: T.M.

date: Hanna – Brunetti

Amanda Joy Musy–Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEL
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Plan & Profile - Driveway

Lands of Bourdet - Pacheco Pass Highway - apn 898-19-005 & 043

UNINCORPORATED
AUGUST 2022

SANTA CLARA COUNTY
CALIFORNIA

SHEET 17 OF 22

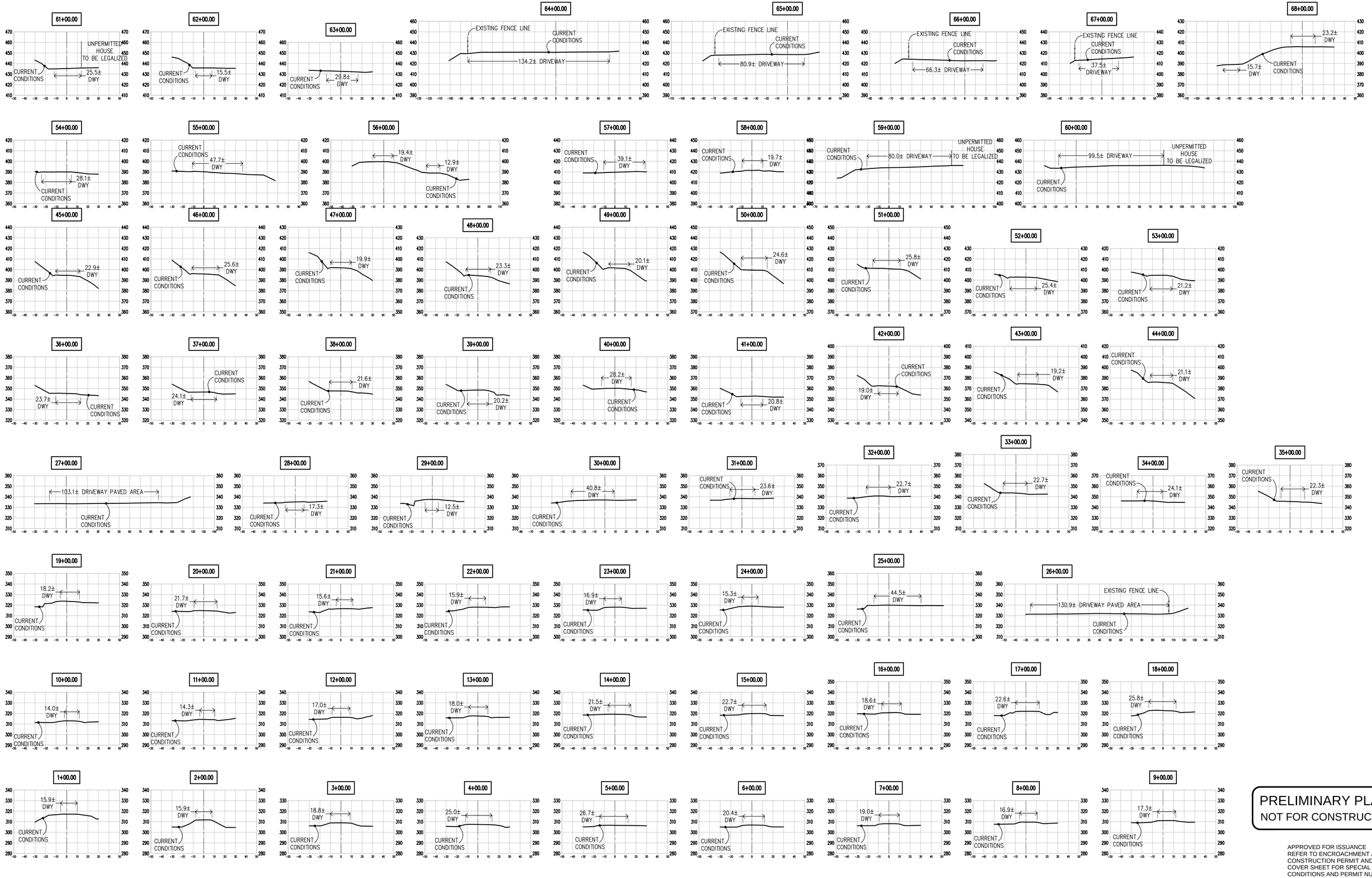
JOB NO. 18085

APPLICANT: BOURDET

ROAD: PACHECO PASS HIGHWAY

COUNTY FILE NO.: PLN20–139

JOB NO. 18085



PRELIMINARY PLANS
NOT FOR CONSTRUCTION

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PLAN # ____ OF ____
SHEET ____

REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1950
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3662
EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: AUGUST 2022
HORIZ. SCALE: 1"=100
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY: ____
DRAWN BY: T.M.

date: ____
Hanna – Brunetti

Amanda Joy Musy–Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEL
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Cross Sections - Driveway

Lands of Bourdet - Pacheco Pass Highway - apn 898-19-005 & 043

UNINCORPORATED
AUGUST 2022

SANTA CLARA COUNTY
CALIFORNIA

SHEET 18 OF 22

JOB NO. 18085

APPLICANT: BOURDET

ROAD: PACHECO PASS HIGHWAY

COUNTY FILE NO.: PLN20–139

JOB NO. 18085

PROJECT NOTES:

1. THE LOCATION OF THE BUILDING PADS AND/OR FOUNDATIONS ARE TO BE ESTABLISHED BY A PERSON AUTHORIZED TO PRACTICE LAND SURVEYING. A LETTER SIGNED AND SEALED BY THAT AUTHORIZED PERSON, STATING THAT HE/SHE HAS LOCATED THE BUILDING CORNERS, AND THEIR LOCATIONS CONFORM TO COUNTY BUILDING SETBACK REQUIREMENTS PER THE APPROVED BUILDING PLANS IS REQUIRED TO BE SUBMITTED TO THE COUNTY ENGINEER.
2. 'THIS PLAN AUTHORIZES THE REMOVAL OF ONLY THOSE TREES WITH TRUNK DIAMETERS GREATER THAN 12 INCHES MEASURED 4.5 FEET ABOVE GROUND WHICH ARE SHOWN TO BE REMOVED. ANY OTHER SUCH TREES ARE NOT TO BE REMOVED UNLESS AN AMENDED PLAN IS APPROVED OR A SEPARATE TREE REMOVAL PERMIT IS OBTAINED FROM THE PLANNING OFFICE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT REMOVAL OF ADDITIONAL TREES HAS BEEN PERMITTED.'
3. NO TREES ARE TO BE REMOVED
4. PRIOR TO GRADING COMPLETION AND RELEASE OF BOND, ALL GRADED AREAS SHALL BE RESEEDED IN CONFORMANCE WITH THE COUNTY GRADING ORDINANCE TO MINIMIZE THE VISUAL IMPACTS OF THE GRADED SLOPES AND REDUCE THE POTENTIAL FOR EROSION ON THE SUBJECT SITE.
5. BOTH DRAINFIELDS MUST BE STAKED AND STRUNG PRIOR TO APPROVAL OF THE SEPTIC DESIGN TO VERIFY THAT THE PROPOSED SEPTIC DESIGN WILL ACTUALLY FIT INTO THE PROPOSED LEACHFIELD AREA, AND CONFORM TO ALL REQUIRED SETBACKS.
6. IF ARCHAEOLOGICAL RESOURCES OR HUMAN REMAINS ARE DISCOVERED DURING CONSTRUCTION, WORK SHALL BE HALTED WITHIN 50 METERS (150 FEET) OF THE FIND UNTIL IT CAN BE EVALUATED BY A QUALIFIED ARCHAEOLOGIST. IF THE FIND IS DETERMINED TO BE SIGNIFICANT, APPROPIATE MITIGATION MEASURES SHALL BE FORMULATED AND IMPLEMENTED.
7. NOTIFY SOILS ENGINEER TWO (2) DAYS PRIOR TO COMMENCEMENT OF ANY GRADING WORK TO COORDINATE THE WORK IN THE FIELD.
8. ALL MATERIALS FOR FILL SHOULD BE APPROVED BY THE SOILS ENGINEER BEFORE IT IS BROUGHT TO THE SITE.
9. IN THE EVENT THAT ARCHEOLOGICAL FEATURES SHOULD BE DISCOVERED AT ANY TIME DURING THE GRADING, SCRAPING OR EXCAVATION, ALL WORK SHOULD BE HALTED IN THE VICINITY OF THE FIND AND AN ARCHAEOLOGIST SHOULD BE CONTACTED IMMEDIATELY TO EVALUATE THE DISCOVERED MATERIAL TO ASSESS ITS AREAL EXTENT, CONDITION, AND SCIENTIFIC SIGNIFICANCE. IF THE DISCOVERED MATERIAL IS DEEMED POTENTIALLY SIGNIFICANT, A QUALIFIED ARCHAEOLOGIST SHOULD MONITOR ANY SUBSEQUENT ACTIVITY IN THE PROXIMITY.
10. IN THE EVENT THAT HUMAN SKELETAL REMAINS ARE ENCOUNTERED, THE APPLICANT IS REQUIRED BY COUNTY ORDINANCE NO. B6-18 TO IMMEDIATELY NOTIFY THE COUNTY CORONER. UPON DETERMINATION BY THE COUNTY CORONER THAT THE REMAINS ARE NATIVE AMERICAN, THE CORONER SHALL CONTACT THE CALIFORNIA NATIVE AMERICAN HERITAGE COMMISSION, PURSUANT TO SUBDIVISION (c) OF SECTION 7050.5 OF THE HEALTH AND SAFETY CODE AND THE COUNTY COORDINATOR OF INDIAN AFFAIRS. NO FURTHER DISTURBANCE OF THE SITE MAY BE MADE EXCEPT AS AUTHORIZED BY THE COUNTY CHAPTER. IF ARTIFACTS ARE FOUND ON THE SITE A QUALIFIED ARCHAEOLOGIST SHALL BE CONTACTED ALONG WITH THE COUNTY PLANNING OFFICE. NO FURTHER DISTURBANCE OF THE ARTIFACTS MAY BE MADE EXCEPT AS AUTHORIZED BY THE COUNTY PLANNING OFFICE.
11. THESE PLANS ARE FOR THE WORK DESCRIBED IN THE SCOPE OF WORK ONLY. A SEPARATE PERMIT WILL BE REQUIRED FOR THE SEPTIC LINE CONSTRUCTION.
12. UPPER 6" OF THE SUBGRADE SOIL SHALL BE SCARIFIED, MOISTURE CONDITIONED AND COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 95%.
13. ALL AGGREGATE BASE MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 95% RELATIVE COMPACTION.
14. ROADWAYS DESIGNATED AS NOT COUNTY MAINTAINED ROADS AS SHOWN ON THIS PLAN WILL NOT BE ELIGIBLE FOR COUNTY MAINTENANCE UNTIL THE ROADWAYS ARE IMPROVED (AT NO COST TO THE COUNTY) TO PUBLIC MAINTENANCE ROAD STANDARDS APPROVED BY THE BOARD OF SUPERVISORS AND IN EFFECT AT SUCH TIME THAT THE ROADWAYS ARE CONSIDERED FOR ACCEPTANCE INTO THE COUNTY'S ROAD SYSTEM.
15. AN APPROVED RESIDENTIAL FIRE SPRINKLER SYSTEM COMPLYING WITH FIRE MARSHAL STANDARD CFMO-SP6 IS REQUIRED TO BE INSTALLED THROUGHOUT THE STRUCTURE.
16. ALL NEW ON-SITE UTILITIES, MAINS AND SERVICES SHALL BE PLACED UNDERGROUND AND EXTENDED TO SERVE THE PROPOSED RESIDENCE.
17. A CONSTRUCTION OBSERVATION LETTER FROM THE RESPONSIBLE GEOTECHNICAL ENGINEER AND CERTIFIED ENGINEERING GEOLOGIST DETAILING CONSTRUCTION OBSERVATIONS AND CERTIFYING THAT THE WORK WAS DONE IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL AND GEOLOGICAL REPORTS SHALL BE SUBMITTED PRIOR TO GRADING COMPLETION AND RELEASE OF BOND.
18. ALL ROOF RUNOFF SHALL BE DIRECTED TO LANDSCAPED OR NATURAL AREAS AWAY FROM BUILDING FOUNDATIONS, TO ALLOW FOR STORM WATER INFILTRATION INTO THE SOIL AND SHEET FLOW.

NOTE TO CONTRACTOR

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.

NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING SURVEY MONUMENTS AND OTHER SURVEY MARKERS DURING CONSTRUCTION. ALL SUCH MONUMENTS OR MARKER'S DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

WHERE THE FIRM OF HANNA & BRUNETTI DOES NOT PROVIDE CONSTRUCTION STAKES, SAID FIRM WILL ASSUME NO RESPONSIBILITY WHATSOEVER FOR IMPROVEMENTS CONSTRUCTED THEREFROM.

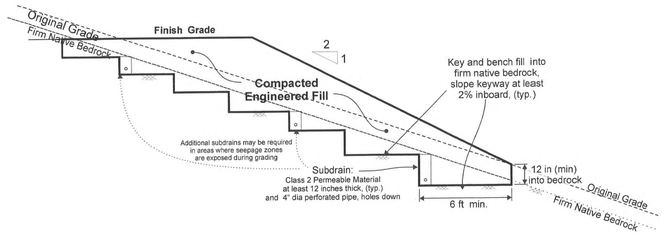
CONTRACTOR TO VERIFY:

CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION OF BUILDING PAD, THE STRUCTURAL SECTION OF FOUNDATION TO DETERMINE BUILDING PAD ELEVATION.

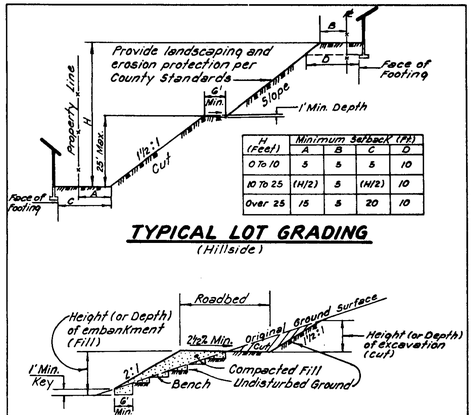
SEE SOILS REPORT AND/OR STRUCTURAL PLANS TO DETERMINE THE ELEVATION OF THE BUILDING FINISH FLOOR AND PAD.

THESE QUANTITIES DO NOT INCLUDE ANY SHRINKAGE, SUBSIDENCE, OVER-EXCAVATION, OR ANY SPECIAL CONDITIONS OR REQUIREMENTS THAT MAY BE SPECIFIED IN THE GEOTECHNICAL INVESTIGATION REPORT. THESE QUANTITIES IN THE AREA FOR PERMIT PURPOSES ONLY. ALL CONTRACTORS BIDDING ON THIS PROJECT SHOULD MAKE THEIR OWN DETERMINATION OF EARTHWORK QUANTITIES PRIOR TO SUBMITTING A BID.

EXCESS MATERIAL SHALL BE OFF-HAULED. IF LOCATION IS WITHIN THE COUNTY A SEPERATED PERMIT SHALL BE REQUIRED.



Geotechnical Engineer to Observe Keying, Benching, & Subdrain Placement During Site Grading



TYPICAL LOT GRADING
(Hillside)

TYPICAL ROAD GRADING
(Hillside)

NOTES

(1) See Grading Ordinance for complete design standards.
(2) See section of manual entitled "Policies and Standards Pertaining to Grading" for additional information.

Approved: Dan Peterson, Manager / County Surveyor, Land Dev., Engineering & Surveying — Date:

COUNTY OF SANTA CLARA
ENVIRONMENTAL MANAGEMENT / GENERAL SERVICES AGENCY

No.	Revision	Date

GRADING STANDARDS — SD G

LEGEND

EXISTING	PROPOSED	
450	454	CONTOUR ELEVATION
(W)	(W)	WATER MAIN
(SD)	(length) LF (size) SD @ S=(grade)	STORM DRAIN
(SS)	(length) LF (size) SS @ S=(grade)	SANITARY SEWER
		ELECTROLIER
		FLOW DIRECTION
		DROP INLET
		MANHOLE
		CURB INLET
		WATER METER SERVICE
		FIRE HYDRANT
		WATER VALVE
		SIDEWALK
		VERTICAL CURB
		CURB & GUTTER
		JOINT TRENCH
		RETAINING WALL
		DRAINAGE SWALE
	SS	SEWER LATERAL
		TREE TO BE REMOVED
	MON	MONUMENT
		ROCK RIP-RAP

ABBREVIATIONS

AC	ASPHALT CONCRETE	EP	EDGE OF PAVEMENT	P.S.E.	PUBLIC SERVICE EASEMENT
AB	AGGREGATE BASE	ER	END OF RETURN	P.S.D.E.	PRIVATE STORM DRAIN EASEMENT
AD	AREA DRAIN	ESMT	EASEMENT	P.S.S.E.	PRIVATE SANITARY SEWER EASEMENT
AGG	AGGREGATE	(E)	EXISTING	P.U.E.	PUBLIC UTILITY EASEMENT
BC	BEGINNING OF CURVE	EX.	EXISTING	PVI	POINT OF VERTICAL INTERSECTION
BPD	BACKFLOW PREVENTER DEVICE	FF	FINISH FLOOR	PVC	POLYVINYL CHLORIDE PIPE
BLDG	BUILDING	FG	FINISH GRADE	R	RADIUS
BOC	BACK OF CURB	FH	FIRE HYDRANT	RCP	REINFORCED CONCRETE PIPE
BO	BLOW OFF		FLOWLINE	R/W	RIGHT OF WAY
BOT	BOTTOM	FOC	FACE OF CURB	RWL	RAINWATER LEADER
BOW	BACK OF WALK		GAS LINE	S	SLOPE
BW	BOTTOM OF WALL	GM	GAS METER	SD	STORM DRAIN PIPE
BWF	BARBWIRE FENCE	GB	GRADE BREAK	SS	SANITARY SEWER PIPE
CATV	CABLE TELEVISION	GUY	GUY WIRE FOR POLE	STM	STORM DRAIN MANHOLE
CB	CATCH BASIN	GV	GATE VALVE	SS MH	SANITARY SEWER MANHOLE
C&G	CURB & GUTTER	HDPE	HIGH DENSITY POLYETHYLENE	SP	SERVICE POLE
CI	CURB INLET	HMA	HOT MIX ASPHALT	STD	STANDARD
CL	CENTERLINE	HP	HIGH POINT	SQ	SQUARE
CMP	CORRUGATED METAL PIPE	INV	INVERT OF PIPE	SW	SIDEWALK
CMU	CONCRETE MASONRY UNIT	IP	IRON PIPE	T	TELEPHONE LINE
CO	CLEAN OUT	JP	JOINT POLE	TBM	TEMPORARY BENCHMARK
CONC	CONCRETE	JT	JOINT TRENCH	TC	TOP OF CURB
CONST	CONSTRUCTION	LF	LINEAR FEET	TCM	TREATMENT CONTROL MEASURES
DDCV	DOUBLE DETECTOR CHECK	LP	LOW POINT	TFC	TOP FACE OF CURB
	VALVE ASSEMBLY	MAX	MAXIMUM	TG	TOP OF GRATE
DI	DROP INLET	MIN	MINIMUM	TOB	TOP OF BANK
DIP	DUCTILE IRON PIPE	N.I.C.	NOT IN CONTRACT	TOE	TOE OF BANK
DMA	DRAINAGE MANAGEMENT AREA	(N)	NEW	TW	TOP OF WALL
DS	DOWNSPOUT	OHU	OVERHEAD UTILITY	TYP	TYPICAL
DWY	DRIVEWAY	(P)	PROPOSED	W	WATER LINE
E	ELECTRIC LINE	PB	PULL BOX	WM	WATER METER
EC	END OF CURVE	PCC	PORTLAND CONCRETE CEMENT	WV	WATER VALVE
EG	EXISTING GRADE	PL	PROPERTY LINE		
ELEV	ELEVATION	PRC	POINT REVERSE CURVE		

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PLAN # ____ OF ____
SHEET ____

REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1933
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3662
EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: AUGUST 2022
HORIZ. SCALE: 1"=20'
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY: ____
DRAWN BY: T.M.

date: ____
Hanna – Brunetti

Amanda Joy Musy-Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEL
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Notes, Abbreviations & Legend

Lands of Bourdet - Pacheco Pass Highway - apn 898-19-005 & 043

UNINCORPORATED
AUGUST 2022

SANTA CLARA COUNTY
CALIFORNIA

SHEET 19 OF 22

JOB NO. 18085

APPLICANT: BOURDET | ROAD: PACHECO PASS HIGHWAY | COUNTY FILE NO.: PLN20-139 | JOB NO. 18085

EROSION CONTROL NOTES

1. EROSION CONTROL MEASURES SHALL BE EFFECTIVE FOR CONSTRUCTION DURING THE RAINY SEASON; OCTOBER 15 THROUGH APRIL 15.

2. NO STORM WATER RUNOFF SHALL BE ALLOWED TO DRAIN INTO THE EXISTING AND/OR PROPOSED UNDERGROUND STORM SYSTEM UNTIL SUITABLE EROSION CONTROL MEASURES ARE FULLY IMPLEMENTED. NO STORM WATER RUNOFF SHALL BE ALLOWED TO ENTER THE STORM DRAIN SYSTEM THAT IS NOT CLEAR, AND FREE OF SILTS.

3. A FIBER ROLL BARRIER PER "DETAIL SE-5" SHALL BE INSTALL ALONG THE PERIMETER OF THE PROJECT SITE. THE LOCATION OF THE FIBER ROLL ALONG THE PERIMETER SHALL BE ADJUSTED TO ELIMINATE SEDIMENT LADEN RUNOFF FROM LEAVING THE SITE. A FIBER ROLL SHALL ALSO BE REQUIRED AROUND THE PERIMETER OF ANY STOCKPILE OR OTHER SITE OF BARE, LOOSE EARTH.

4. ALL STORM DRAIN MANHOLES, CATCH BASINS, AND/OR DROP INLETS THAT ARE TO ACCEPT STORM WATER SHALL HAVE INLET PROTECTION MEASURES PER DETAIL SE-10. STORM WATER RUNOFF SHALL BE DIRECTED TO THESE INLETS ONLY. STORM DRAIN CATCH BASINS THAT ARE NOT COMPLETE, SHALL BE BLOCKED OFF COMPLETELY.

5. THE NAME, ADDRESS, AND 24 HOUR TELEPHONE NUMBER OF THE PERSON RESPONSIBLE FOR THE IMPLEMENTATION OF THE EROSION CONTROL PLAN SHALL BE PROVIDED TO THE COUNTY.

6. PRIOR TO GRADING, AN ENTRANCE SHALL BE CONSTRUCTED, CONSISTING OF A MINIMUM OF 50 LF OF DRAIN ROCK, 3" IN DIAMETER, PLACED OVER MIRAFI 500X (OR EQUAL) PER DETAIL TC-1. THE ENTRANCE SHALL CONFORM TO "CONSTRUCTION ENTRANCE DETAIL TC-1". THERE SHALL BE ONLY ONE ENTRANCE/EXIT POINT TO THE SITE DURING THE RAINY SEASON. THE LOCATION SHALL BE AS SHOWN ON THESE PLANS, OR AT A LOCATION APPROVED BY THE COUNTY.

7. ALL AREAS OF BARE, TURNED OR DISTURBED EARTH SHALL BE STABILIZED BY USE OF HYDROSEED PER THE TABLE BELOW. ALL STOCKPILES, AND/OR BORROW AREAS SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES SUCH AS A PERIMETER SILT FENCE, AND OTHER METHODS TO PREVENT ANY EROSION OR SILTS MIGRATION. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED. CHANGES TO THE EROSION CONTROL PLAN SHALL BE MADE TO MEET FIELD CONDITIONS, BUT ONLY WITH THE APPROVAL OF, OR AT THE DIRECTION OF THE COUNTY INSPECTOR. THE STORM DRAIN SYSTEM SHALL MAINTAIN A FORM OF DRAIN INLET PROTECTION UNTIL COUNTY ACCEPTS THE FINAL STREET IMPROVEMENTS. THE DRAIN INLET PROTECTION SHALL BE MAINTAINED, EFFECTIVE AND SUBJECT TO COUNTY INSPECTOR'S APPROVAL.

8. ALL PAVED STREET, AND AREAS ADJACENT TO THE SITE SHALL BE KEPT CLEAR OF EARTH MATERIALS AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO ELIMINATE SEDIMENT LADEN RUNOFF FROM ENTERING THE STORM DRAIN SYSTEM.

9. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSPECT AND REPAIR ALL EROSION CONTROL FACILITIES AT THE END OF EACH DAY DURING THE RAINY SEASON. ANY DAMAGED STRUCTURAL MEASURES ARE TO BE REPAIRED BY END OF THE DAY. TRAPPED SEDIMENT IN "SD INLETS" (AND OTHER EROSION CONTROL MEASURES) SHALL BE REMOVED TO MAINTAIN TRAP EFFIENCY. REMOVED SEDIMENT SHALL BE DISPOSED BY SPREADING ON SITE, WHERE IT WILL NOT MIGRATE.

10. IT IS THE RESPOSIBILITY OF THE CONTRACTOR TO PREVENT THE FORMATION OF AIRBORNE DUST NUISANCE AND SHALL BE RESPOSIBILE FOR ANY DAMAGE RESULTING FROM A FAILURE TO DO SO.

11. ALL DRAIN SWALES SHALL BE PER DETAIL EC-9.

12. INCOMPLETE GRADING SHALL NOT BE ALLOWED. CONTRATOR SHALL MAINATIN A DRAIN PATH AS SHOWN ON THIS PLAN. SAID DRAIN PATH SHALL BE MAINTAINED LINED DRAIN SWALES, AND INLET PROTECTION AT A MINIMUM.
IF PONDING DOES OCCUR ON THE SITE AFTER GRADING, THE WATER MUST BE FREE AND CLEAR OF SEDIMENT PRIOR TO DISCHARGE TO THE STORM DRAIN SYSTEM. THIS REQUIREMENT MAY NECESSITATE THE USE OF NATURAL AND/OR MECHANICAL DESILTING METHODS, SUBJECT TO APPROVAL BY THE COUNTY INSPECTOR.

13. IF THESE EROSION CONTROL MEASURE PROVE INADEQUATE, STRAW MULCH, TACKIFIER, AND ADDITIONAL HYDROSEEDING MAY BE REQUIRED.

HYDROSEED TABLE

ITEM
BROMUS SEED OR OTHER NATIVE GRASS

14. ALL GRADING WORK BETWEEN OCTOBER 15th AND APRIL 15th IS AT THE DISCRETION OF THE SANTA CLARA COUNTY BUILDING OFFICIAL.

15. PROVIDE SHRUBS AND/OR TREES REQUIRED ON SLOPES GREATER THAN 15 FEET IN VERTICAL HEIGHT.

16. THE OWNER/OWNER'S CONTRACTOR, AGENT, AND/OR ENGINEER SHALL INSTALL AND MAINTAIN THROUGHOUT THE DURATION OF CONSTRUCTION AND UNTIL THE ESTABLISHMENT OF PERMANENT STABILIZATION AND SEDIMENT CONTROL WITHIN THE SANTA CLARA COUNTY MAINTAINED ROAD RIGHT OF WAY AND ANY PORTION OF THE SITE WHERE STORM WATER RUN-OFF IS DIRECTLY FLOWING INTO THE SANTA CLARA COUNTY MAINTAINED ROAD RIGHT OF WAY BEST MANAGEMENT PRACTICES (BMP'S) TO PREVENT CONSTRUCTION MATERIALS, EXCAVATED MATERIALS, WASTE MATERIALS, AND SEDIMENT CAUSED BY EROSION FROM CONSTRUCTION ACTIVITIES ENTERING THE STORM DRAIN SYSTEM, WATERWAYS, AND ROADWAY INFRASTRUCTURE. BMP'S SHALL INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING PRACTICES APPLICABLE TO THE PUBLIC ROAD AND EXPRESSWAY FACILITIES:

   A) REDUCTION OF POLLUTANTS IN STORM WATER DISCHARGES FROM THE CONSTRUCTION SITE AND THE CONTRACTOR'S MATERIAL AND EQUIPMENT LAYDOWN/STAGING AREAS.

   B) PREVENTION OF TRACKING OF MUD, DIRT AND CONSTRUCTION MATERIALS ONTO PUBLIC ROAD RIGHT OF WAY.

   C) PREVENTION OF DISCHARGE OF WATER RUNOFF DURING DRY AND WET WEATHER CONDITIONS ONTO PUBLIC ROAD RIGHT OF WAY

17. THE OWNER/OWNER'S CONTRACTOR, AGENT, AND/OR ENGINEER SHALL ENSURE THAT ALL TEMPORARY CONSTRUCTION FACILITIES, INCLUDING BUT NOT LIMITED TO CONSTRUCTION MATERIALS, DELIVERIES, HAZARDOUS AND NON-HAZARDOUS MATERIAL STORAGE, EQUIPMENT, TOOLS, PORTABLE TOILETS, CONCRETE WASHOUT, GARBAGE CONTAINERS, LAYDOWN YARDS, SECONDARY CONTAINMENT AREAS, ETC. ARE LOCATED OUTSIDE THE SANTA CLARA COUNTY MAINTAINED ROAD RIGHT OF WAY AND ANY PORTION OF THE SITE WHERE STORM WATER RUN-OFF IS DIRECTLY FLOWING INTO THE SANTA CLARA COUNTY MAINTAINED ROAD RIGHT OF WAY SHALL HAVE SEASONALLY APPROPRIATE BMP'S INSTALLED AND MAINTAINED AT ALL TIMES.

LEGEND

PROVIDE FIBER ROLL SLOPE PROTECTION PER DETAIL SE-5

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

GRAPHIC SCALE

400 0 200 400 800 1600

(IN FEET)
1 inch = 400 ft.

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PLAN # ____ SHEET ____ OF ____

REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1955
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
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EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: AUGUST 2022
HORIZ. SCALE: 1"=400
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY: ____
DRAWN BY: T.M.

date: ____
Hanna – Brunetti

Amanda Joy Musy–Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEZ
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Erosion Control Plan

Lands of Bourdet - Pacheco Pass Highway - apn 898-19-005 & 043

UNINCORPORATED
AUGUST 2022

SANTA CLARA COUNTY
CALIFORNIA

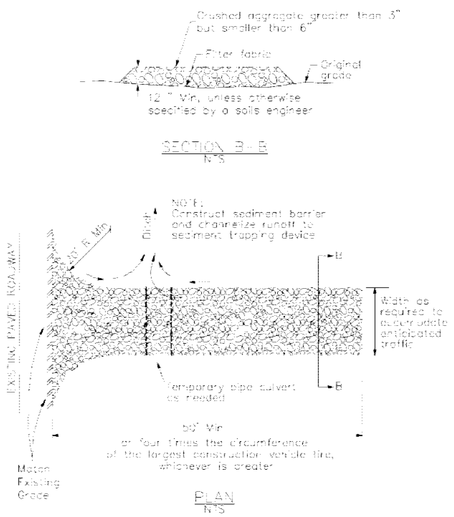
SHEET 20 OF 22

JOB NO. 18085

APPLICANT: BOURDET ROAD: PACHECO PASS HIGHWAY COUNTY FILE NO.: PLN20-139 JOB NO. 18085

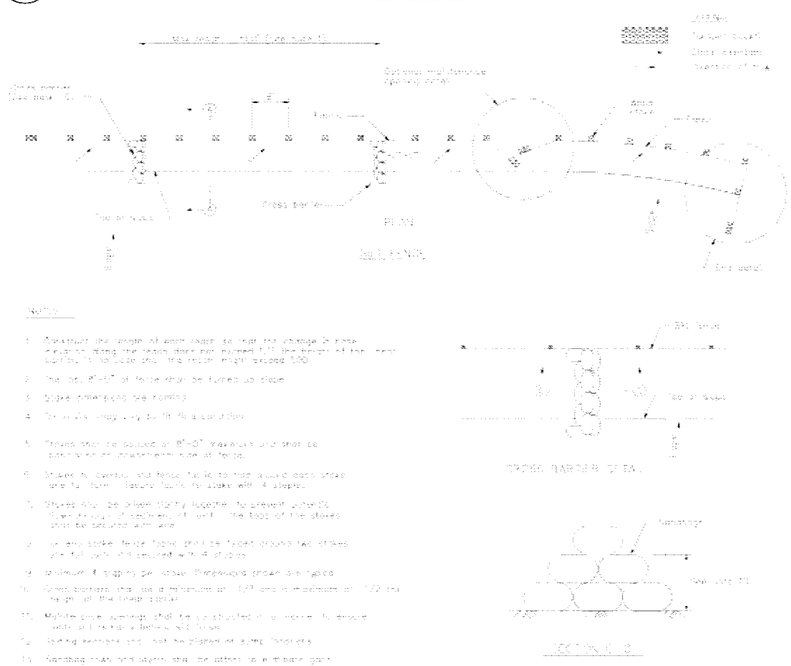
3 Stabilized Construction Entrance/Exit

CASQA Detail TC-1



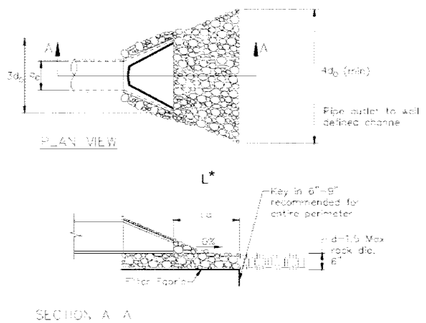
1 Silt Fence

CASQA Detail SE-1



4 Velocity Dissipation Devices

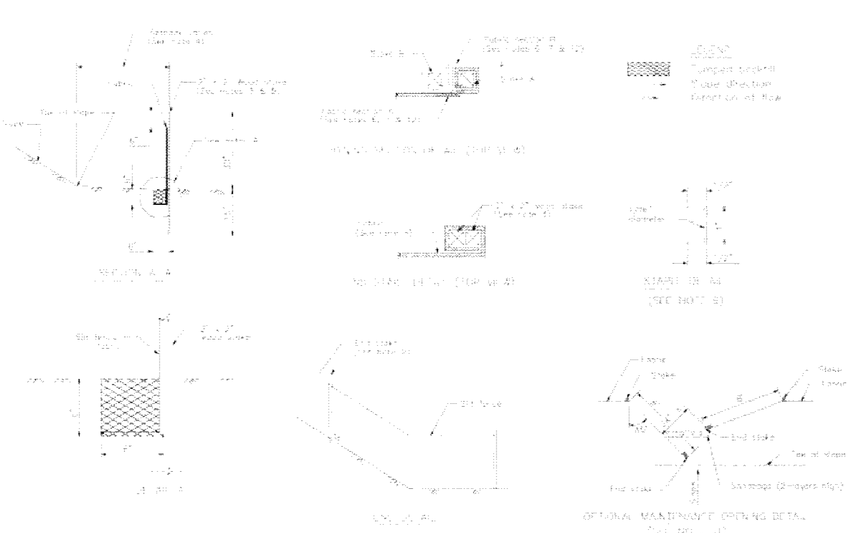
CASQA Detail EC-10



* Length per ABAG Design Standards

2 Silt Fence

CASQA Detail SE-1



Source for Graphics: California Stormwater BMP Handbook, California Stormwater Quality Association, January 2003.
Available from www.cabmphandbooks.com.

STANDARD BEST MANAGEMENT PRACTICE NOTES

1. Solid and Demolition Waste Management: Provide designated waste collection areas and containers on site away from streets, gutters, storm drains, and waterways, and arrange for regular disposal. Waste containers must be watertight and covered at all times except when waste is deposited. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C3) or latest.
2. Hazardous Waste Management: Provide proper handling and disposal of hazardous wastes by a licensed hazardous waste material hauler. Hazardous wastes shall be stored and properly labeled in sealed containers constructed of suitable materials. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-5 to C-6) or latest.
3. Spill Prevention and Control: Provide proper storage areas for liquid and solid materials, including chemicals and hazardous substances, away from streets, gutters, storm drains, and waterways. Spill control materials must be kept on site where readily accessible. Spills must be cleaned up immediately and contaminated soil disposed properly. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-7 to C-8, C-13 to C-14) or latest.
4. Vehicle and Construction Equipment Service and Storage: An area shall be designated for the maintenance, where on-site maintenance is required, and storage of equipment that is protected from stormwater run-on and runoff. Measures shall be provided to capture any waste oils, lubricants, or other potential pollutants and these wastes shall be properly disposed of off site. Fueling and major maintenance/repair, and washing shall be conducted off-site whenever feasible. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C9) or latest.
5. Material Delivery, Handling and Storage: In general, materials should not be stockpiled on site. Where temporary stockpiles are necessary and approved by the County, they shall be covered with secured plastic sheeting or tarp and located in designated areas near construction entrances and away from drainage paths and waterways. Barriers shall be provided around storage areas where materials are potentially in contact with runoff. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-11 to C-12) or latest.
6. Handling and Disposal of Concrete and Cement: When concrete trucks and equipment are washed on-site, concrete wastewater shall be contained in designated containers or in a temporary lined and watertight pit where wasted concrete can harden for later removal. If possible have concrete contractor remove concrete wash water from site. In no case shall fresh concrete be washed into the road right-of-way. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-15 to C-16) or latest.
7. Pavement Construction Management: Prevent or reduce the discharge of pollutants from paving operations, using measures to prevent run-on and runoff pollution and properly disposing of wastes. Avoid paving in the wet season and reschedule paving when rain is in the forecast. Residue from saw-cutting shall be vacuumed for proper disposal. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-17 to C-18) or latest.
8. Contaminated Soil and Water Management: Inspections to identify contaminated soils should occur prior to construction and at regular intervals during construction. Remediating contaminated soil should occur promptly after identification and be specific to the contaminant identified, which may include hazardous waste removal. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-19 to C-20) or latest.
9. Sanitary/Septic Water Management: Temporary sanitary facilities should be located away from drainage paths, waterways, and traffic areas. Only licensed sanitary and septic waste haulers should be used. Secondary containment should be provided for all sanitary facilities. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C-21) or latest.
10. Inspection & Maintenance: Areas of material and equipment storage sites and temporary sanitary facilities must be inspected weekly. Problem areas shall be identified and appropriate additional and/or alternative control measures implemented immediately, within 24 hours of the problem being identified.

STANDARD EROSION CONTROL NOTES

1. Sediment Control Management:

   Tracking Prevention & Clean Up: Activities shall be organized and measures taken as needed to prevent or minimize tracking of soil onto the public street system. A gravel or proprietary device construction entrance/exit is required for all sites. Clean up of tracked material shall be provided by means of a street sweeper prior to an approaching rain event, or at least once at the end of each workday that material is tracked, or, more frequently as determined by the County Inspector. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages B-31 to B-33) or latest.

   Storm Drain Inlet and Catch Basin Inlet Protection: All inlets within the vicinity of the project and within the project limits shall be protected with gravel bags placed around inlets or other inlet protection. At locations where exposed soils are present, staked fiber roles or staked silt fences can be used. Inlet filters are not allowed due to clogging and subsequent flooding. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages B-49 to B-51) or latest.

   Storm Water Runoff: No storm water runoff shall be allowed to drain in to the existing and/or proposed underground storm drain system or other above ground watercourses until appropriate erosion control measures are fully installed.

   Dust Control: The contractor shall provide dust control in graded areas as required by providing wet suppression or chemical stabilization of exposed soils, providing for rapid clean up of sediments deposited on paved roads, furnishing construction road entrances and vehicle wash down areas, and limiting the amount of areas disturbed by clearing and earth moving operations by scheduling these activities in phases.

   Stockpiling: Excavated soils shall not be placed in streets or on paved areas. Borrow and temporary stockpiles shall be protected with appropriate erosion control measures(tarps, straw bales, silt fences, ect.) to ensure silt does not leave the site or enter the storm drain system or neighboring watercourse.
2. Erosion Control: During the rainy season, all disturbed areas must include an effective combination of erosion and sediment control. It is required that temporary erosion control measures are applied to all disturbed soil areas prior to a rain event. During the non-rainy season, erosion control measures must be applied sufficient to control wind erosion at the site.
3. Inspection & Maintenance: Disturbed areas of the Project's site, locations where vehicles enter or exit the site, and all erosion and sediment controls that are identified as part of the Erosion Control Plans must be inspected by the Contractor before, during, and after storm events, and at least weekly during seasonal wet periods. Problem areas shall be identified and appropriate additional and/or alternative control measures implemented immediately, within 24 hours of the problem being identified.
4. Project Completion: Prior to project completion and signoff by the County Inspector, all disturbed areas shall be reseeded, planted, or landscaped to minimize the potential for erosion on the subject site.
5. It shall be the Owner's/Contractor's responsibility to maintain control of the entire construction operation and to keep the entire site in compliance with the erosion control plan.
6. Erosion and sediment control best management practices shall be operable year round or until vegetation is fully established on landscaped surfaces.

ABATEMENT PLANS

FOR

ON THE LANDS OF BOURDET
PACHECO PASS HIGHWAY
ALL OF PARCEL 2 AS SHOWN IN BOOK 327 OF MAPS AT PAGES 25-26
FILED ON JULY 30th, 1973
SANTA CLARA COUNTY, CALIFORNIA
A.P.N.: 898-19-005 & 043

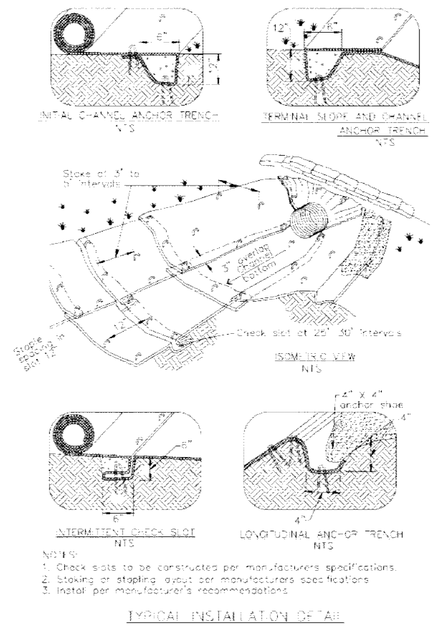
Project Information

Best Management Practices and Erosion Control Details Sheet 1
County of Santa Clara

BMP-1

7 Geotextiles and Mats

CASQA Detail EC-7

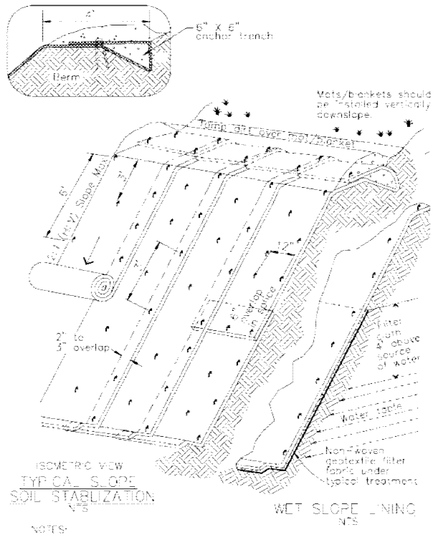


NOTES:
1. Check slots to be constructed per manufacturer's specifications.
2. Stoking or stapling about per manufacturers specifications
3. Install per manufacturer's recommendations.

TYPICAL INSTALLATION DETAIL

5 Geotextiles and Mats

CASQA Detail EC-7

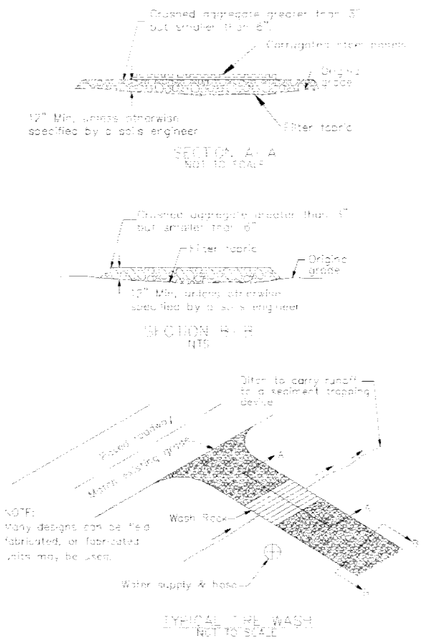


NOTES:
1. Slope surface shall be free of rocks, clods, sticks and grass. Mats/blankets shall have good soil contact
2. Lay blankets loosely and stake or staple to maintain direct contact with the soil. Do not stretch
3. Install per manufacturer's recommendations

TYPICAL INSTALLATION DETAIL

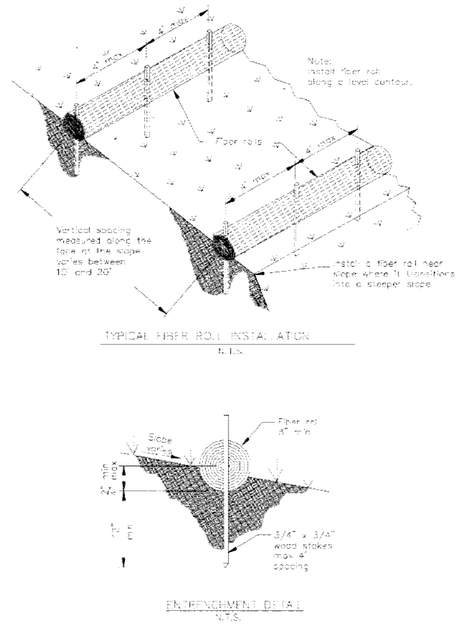
3 Entrance/Outlet Tire Wash

CASQA Detail TC-3



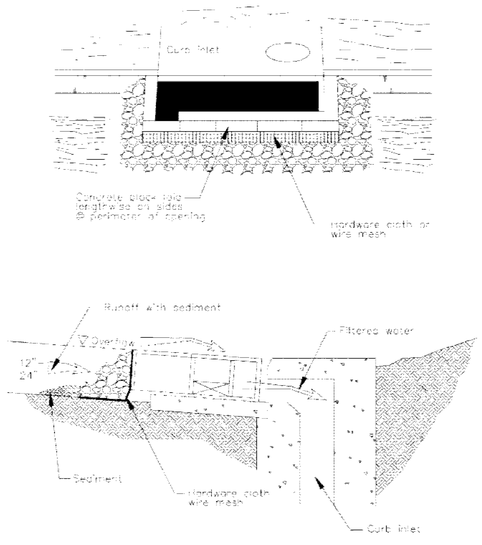
1 Fiber Rolls

CASQA Detail SE-5



8 Storm Drain Inlet Protection

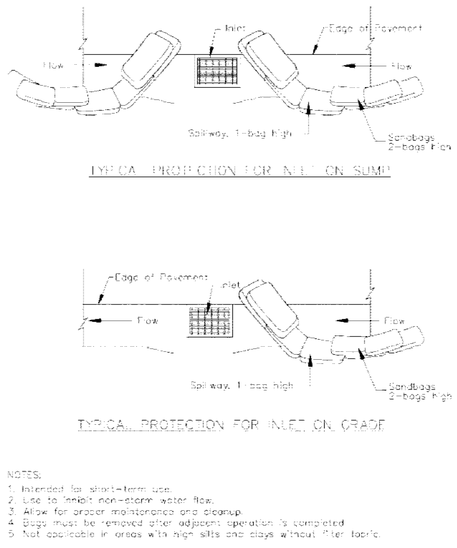
CASQA Detail SE-10



D) PROTECTION – TYPE 4
NOT TO SCALE

6 Storm Drain Inlet Protection

CASQA Detail SE-10

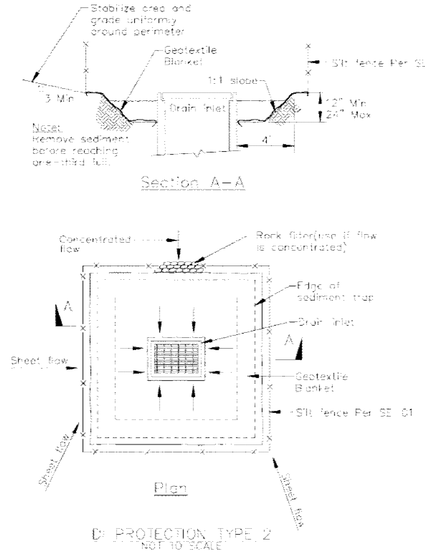


NOTES:
1. Intended for short-term use.
2. Use to inhibit non-storm water flow.
3. Allow for proper maintenance and cleanup.
4. Bags must be removed after adjacent operation is completed.
5. Not applicable in areas with high silts and clays without filter fabric.

D) PROTECTION TYPE 3
NOT TO SCALE

4 Storm Drain Inlet Protection

CASQA Detail SE-10

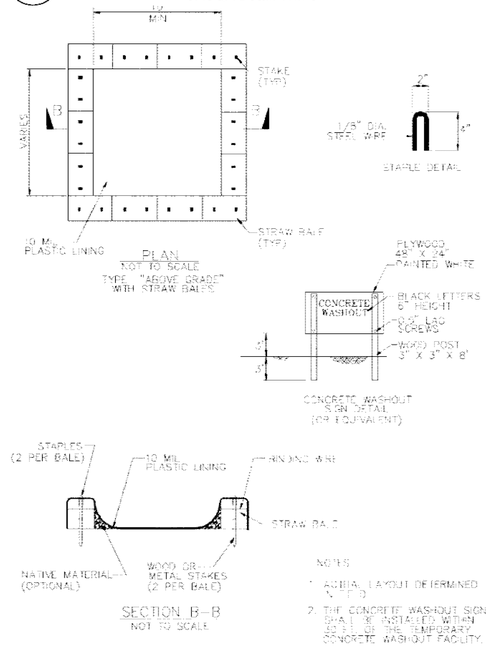


D) PROTECTION TYPE 2
NOT TO SCALE

Notes:
1. For use in cleared and grubbed and in graded areas.
2. Shape basin so that longest inflow area faces longest length of pad.
3. For concentrated flows, shape basin in 2:1 ratio with length oriented towards direction of flow.

2 Concrete Waste Management

CASQA Detail WM-8



NOTES
1. AS BUILT LAYOUT DETERMINED IN FIELD
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 50 LF OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

Source for Graphics: California Stormwater BMP Handbook, California Stormwater Quality Association, January 2003.
Available from www.cabmphandbooks.com.

Project Information

ABATEMENT PLANS

FOR

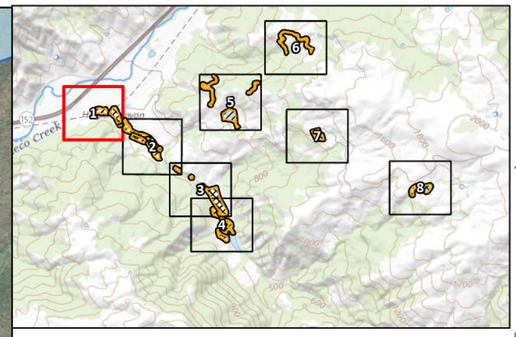
ON THE LANDS OF BOURDET
PACHECO PASS HIGHWAY
BOOK 327 OF MAPS AT PAGES 25-26
FILED ON JULY 30th, 1973
ALL OF PARCEL 2 AS SHOWN IN BOOK 327 OF MAPS AT PAGES 25-26
SANTA CLARA COUNTY, CALIFORNIA
A.P.N.: 898-19-005 & 043

Best Management Practices and Erosion Control Details Sheet 2
County of Santa Clara

BMP-2

Appendix K

Santa Clara Valley Habitat Project Impact Maps;
Santa Clara Valley Habitat Plan Land Cover Map
Santa Clara Valley Habitat Plan Wildlife Survey Areas Map
Closeup of V-3, with TOB;
Closeup of V-7 and V-8, with TOB



Harper Canyon Creek Top-of-Bank (2020 estimate)
Category 1 Stream Buffer
Category 2 Stream Buffer

Impact Type

Permanent
Temporary
Permanent Buffer (50')
Temporary Buffer (10')

Land Cover Type

Blue Oak Woodland
California Annual Grassland
Coast Live Oak Forest and Woodland
Developed/Ruderal
Diablan Sage Scrub
Mixed Oak Woodland and Forest
Pond
Sycamore Alluvial Woodland
Valley Oak Woodland

Impact Type	Land Cover Type	Area (ac.)	Area (sq. ft.)
Permanent	California Annual Grassland	3.5059	152718.27
Permanent	Coast Live Oak Forest and Woodland	0.7368	32094.23
Permanent	Developed/Ruderal	3.1546	137415.77
Permanent	Diablan Sage Scrub	0	0.74
Permanent	Mixed Oak Woodland and Forest	0.41	17859.71
Permanent	Pond	0.4407	19197.85
Permanent	Sycamore Alluvial Woodland	1.7649	76877.5
Permanent	Valley Oak Woodland	8.6136	375209.24
Temporary	Blue Oak Woodland	0.0036	158.23
Temporary	California Annual Grassland	6.3232	275439.2
Temporary	Developed/Ruderal	0.4822	21005.4
Temporary	Diablan Sage Scrub	0.0053	231.58
Temporary	Mixed Oak Woodland and Forest	1.6989	74002.5
Temporary	Pond	0.531	23131.89
Temporary	Sycamore Alluvial Woodland	4.1655	181447.57
Temporary	Valley Oak Woodland	0.0565	2460.4

UniqueID	Name	Description
V-1	Stockpile Area	A large stockpile of material near the entrance to the property. Adjacent to Harper Canyon Creek.
V-2	Double Culvert Crossing	Erosion of crossing fill above culverts due to improperly placed concrete slope protection.
V-20	Fill Area	Unpermitted fill area to be legalized

N

1:1,500

0 75 150 300 Feet

0 20 40 80 Meters

Author: NicolasAnderson
Projection: Lambert Conformal Conic
Datum: NAD 1983 2011
Coordinate System: NAD 1983 2011 StatePlane California III FIPS 0403 Ft US

SEQUOIA Ecological Consulting, Inc.

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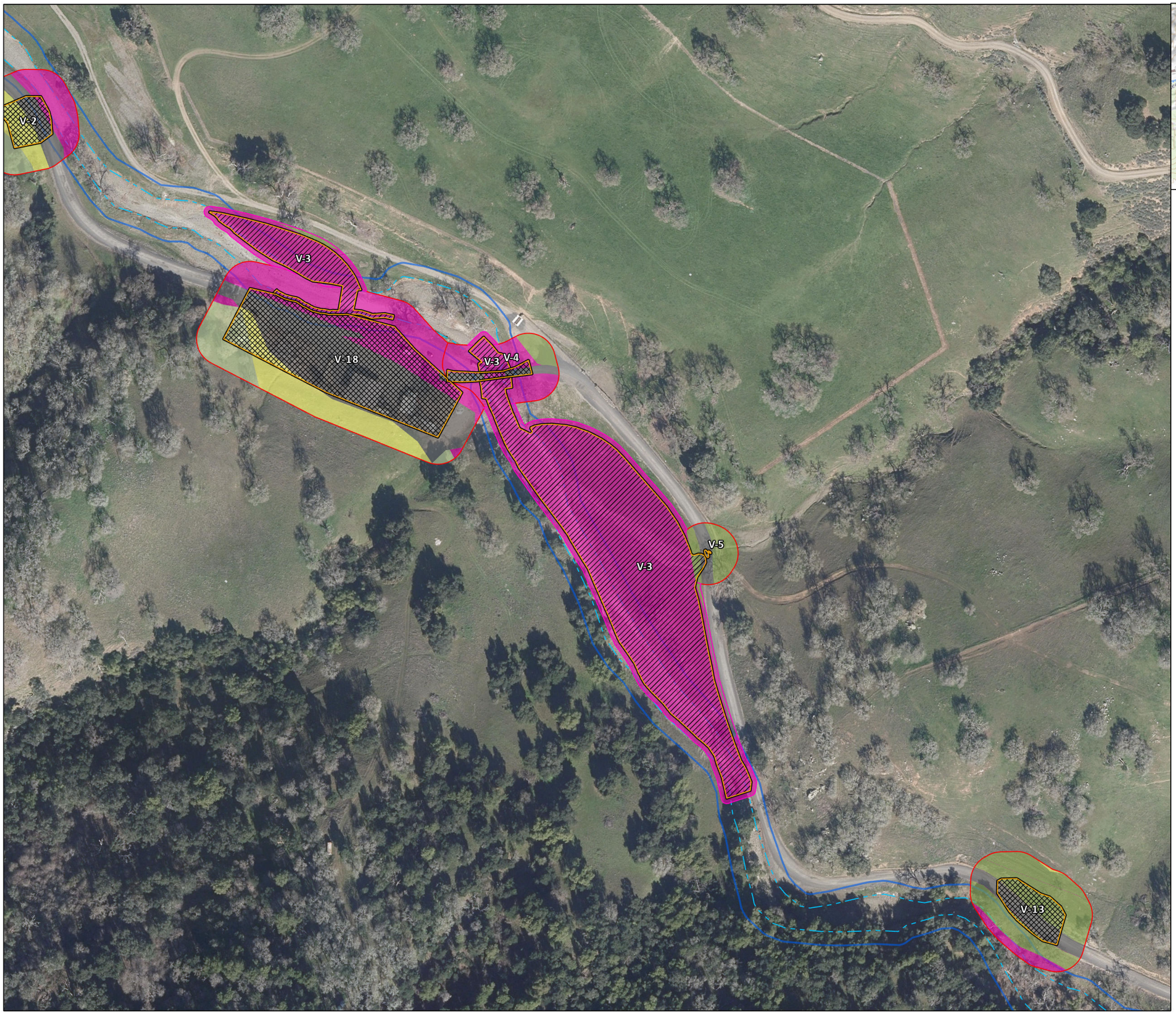

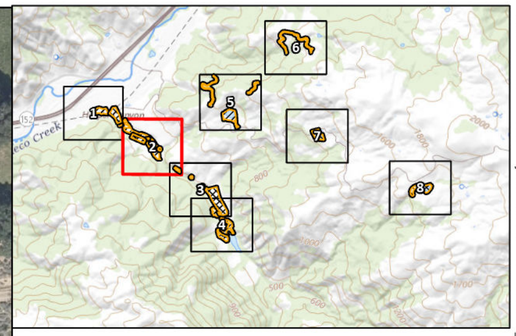

Harper Canyon Creek Top-of-Bank (2020 estimate)
Category 1 Stream Buffer
Category 2 Stream Buffer

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Temporary Buffer (10')

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Valley Oak Woodland

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Temporary	Developed/Ruderal	0.4822	21005.4
Temporary	Diablan Sage Scrub	0.0053	231.58
Temporary	Mixed Oak Woodland and Forest	1.6989	74002.5
Temporary	Pond	0.531	23131.89
Temporary	Sycamore Alluvial Woodland	4.1655	181447.57
Temporary	Valley Oak Woodland	0.0565	2460.4

UniqueID	Name	Description
V-3	Grading in Harper Canyon Creek	Approximate graded area of impacts along lower Harper Canyon Creek.
V-4	Bridge over Harper Canyon Creek	Bridge construction in Harper Canyon Creek Channel.
V-13	Harper Canyon Creek Road Grading	Unpermitted road grading along Harper Canyon Creek.
V-18	Bridge Area Construction	Building pad adjacent to the bridge and the building footprints of several unpermitted structures.
V-5	Double Culvert Crossing 1	Erosion of crossing and fill above double culvert.

N

1:1,500

0 75 150 300 Feet

0 20 40 80 Meters

Author: NicolasAnderson
Projection: Lambert Conformal Conic
Datum: NAD 1983 2011
Coordinate System: NAD 1983 2011 StatePlane California III FIPS 0403 Ft US

SEQUOIA Ecological Consulting, Inc.

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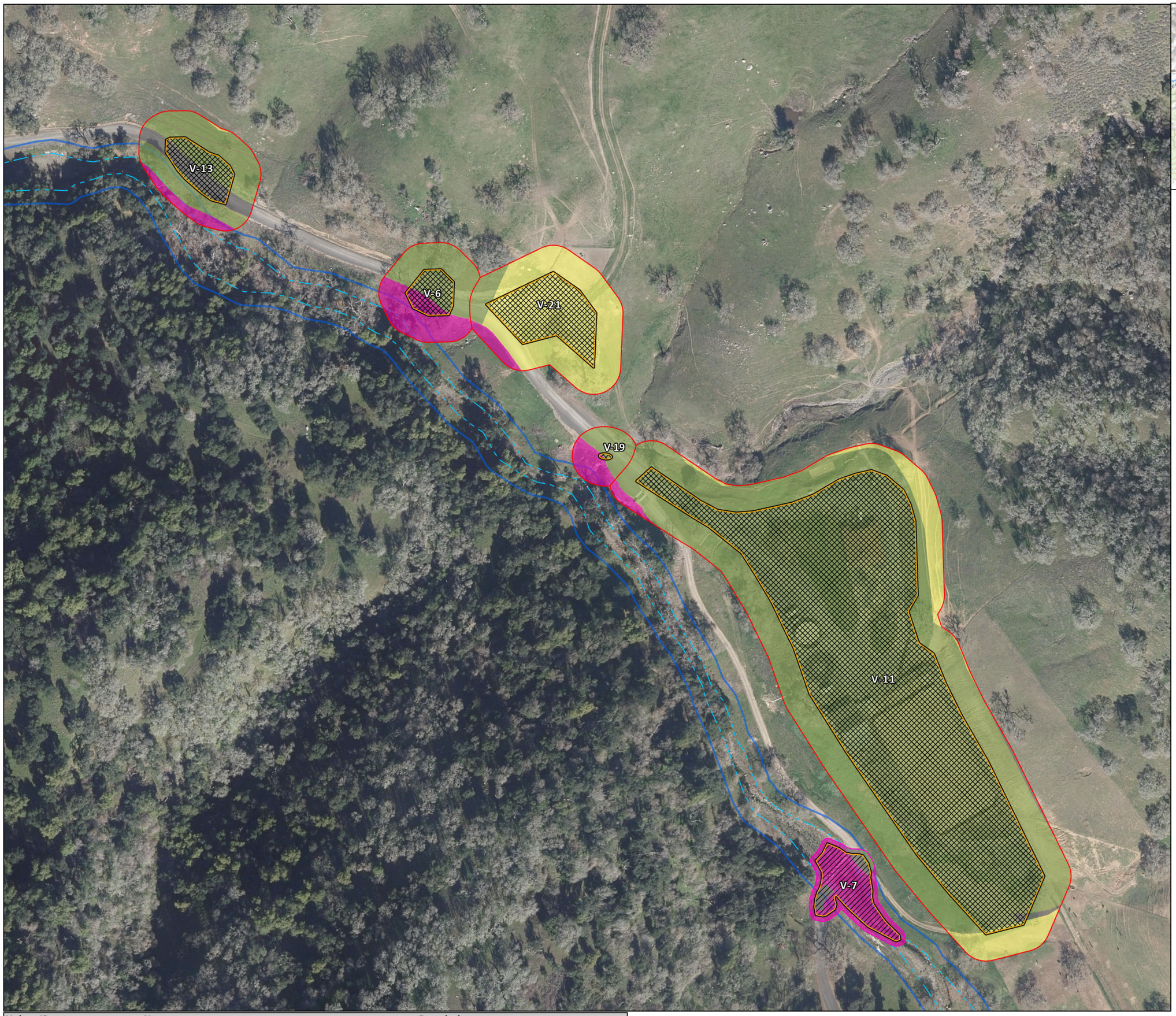

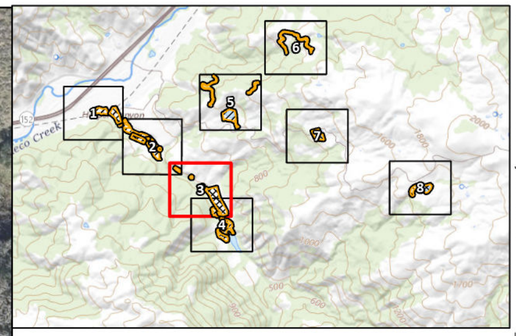

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Category 1 Stream Buffer
Category 2 Stream Buffer

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Permanent
Temporary
Permanent Buffer (50')
Temporary Buffer (10')

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California Annual Grassland
Coast Live Oak Forest and Woodland
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Temporary	Sycamore Alluvial Woodland	4.1655	181447.57
Temporary	Valley Oak Woodland	0.0565	2460.4

UniqueID	Name	Description
V-6	Double Culvert Crossing 2	Culvert crossing for drainage into Harper Canyon Creek.
V-11	House, Horse Arena Area	Unpermitted grading to construct house, horse arena, and other structures.
V-13	Harper Canyon Creek Road Grading	Unpermitted road grading along Harper Canyon Creek.
V-19	Double Culvert Crossing on a Tributary	Plastic double culvert of 30-inch diameter installed with cast-in-place concrete.
V-21	Turn Around Grading	Unpermitted turn around grading
V-7	Creek Crossing Downstream of Impoundment	Realignment of middle Harper Canyon Creek.

N

1:1,500

0 75 150 300 Feet

0 20 40 80 Meters

Author: NicolasAnderson
Projection: Lambert Conformal Conic
Datum: NAD 1983 2011
Coordinate System: NAD 1983 2011 StatePlane California III FIPS 0403 Ft US

SEQUOIA Ecological Consulting, Inc.

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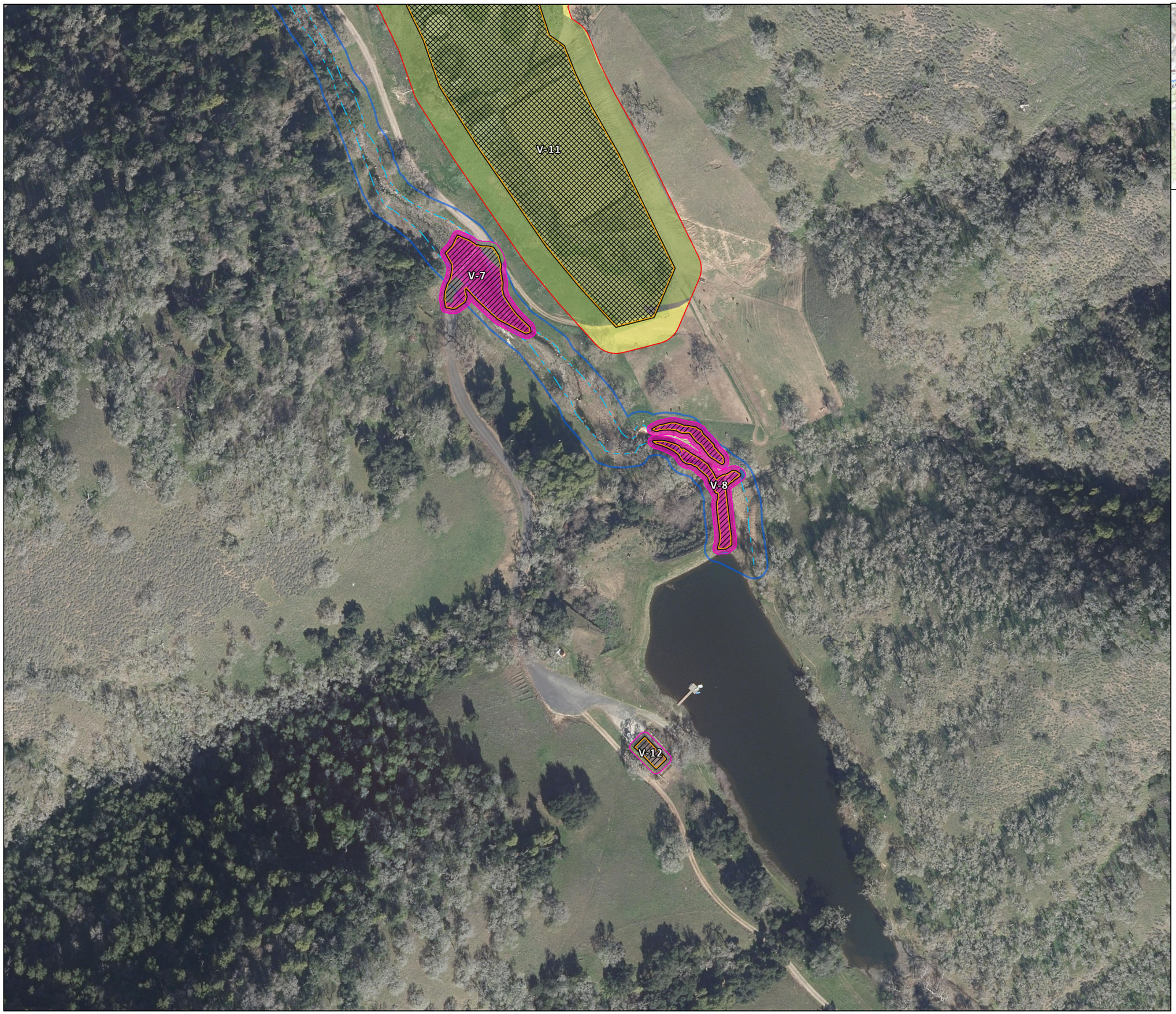

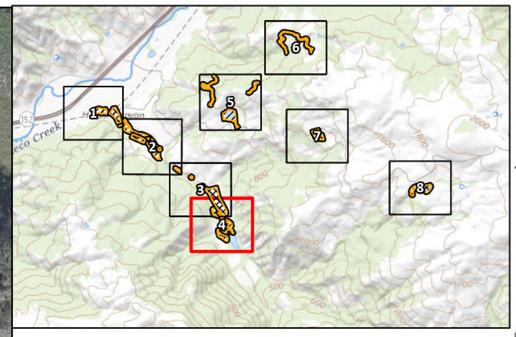

Harper Canyon Creek Top-of-Bank (2020 estimate)
Category 1 Stream Buffer
Category 2 Stream Buffer

Impact Type

Permanent
Temporary
Permanent Buffer (50')
Temporary Buffer (10')

Land Cover Type

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Temporary	Valley Oak Woodland	0.0565	2460.4

UniqueID	Name	Description
V-8	Impoundment on Harper Canyon Creek	Eroded eastern drainage and concrete blocks placed across eastern drainage.
V-11	House, Horse Arena Area	Unpermitted grading to construct house, horse arena, and other structures.
V-12	ADU Area	Unpermitted grading to construct secondary residence.
V-7	Creek Crossing Downstream of Impoundment	Realignment of middle Harper Canyon Creek.

N

1:1,500

0 75 150 300 Feet

0 20 40 80 Meters

Author: NicolasAnderson
Projection: Lambert Conformal Conic
Datum: NAD 1983 2011
Coordinate System: NAD 1983 2011 StatePlane California III FIPS 0403 Ft US

SEQUOIA Ecological Consulting, Inc.

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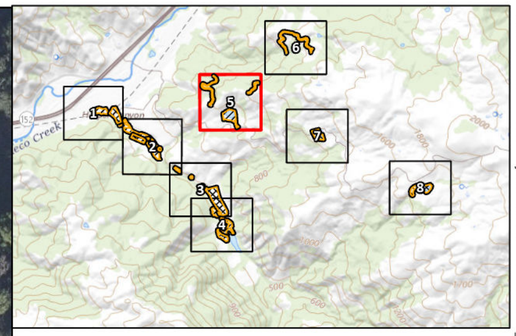

Harper Canyon Creek Top-of-Bank (2020 estimate)
Category 1 Stream Buffer
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Temporary
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Temporary	Sycamore Alluvial Woodland	4.1655	181447.57
Temporary	Valley Oak Woodland	0.0565	2460.4

UniqueID	Name	Description
V-16	Upland Road Grading 2	Unpermitted road grading
V-15	Upland Road Grading 1	Unpermitted road grading
V-9	West Cattle Stock Pond Impoundment	Dam modification and expansion.
V-9	West Cattle Stock Pond Impoundment	Dam modification and expansion.

N

1:1,500

0 75 150 300 Feet

0 20 40 80 Meters

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Datum: NAD 1983 2011
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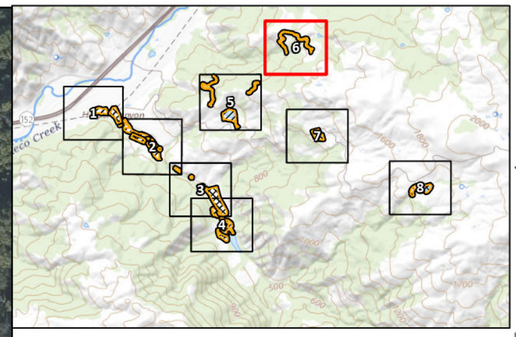

Harper Canyon Creek Top-of-Bank (2020 estimate)
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Temporary	Valley Oak Woodland	0.0565	2460.4

UniqueID	Name	Description
V-17	Upland Road Grading 3	Unpermitted road grading

N

1:1,500

0 75 150 300 Feet

0 20 40 80 Meters

Author: NicolasAnderson
Projection: Lambert Conformal Conic
Datum: NAD 1983 2011
Coordinate System: NAD 1983 2011 StatePlane California III FIPS 0403 Ft US

SEQUOIA Ecological Consulting, Inc.

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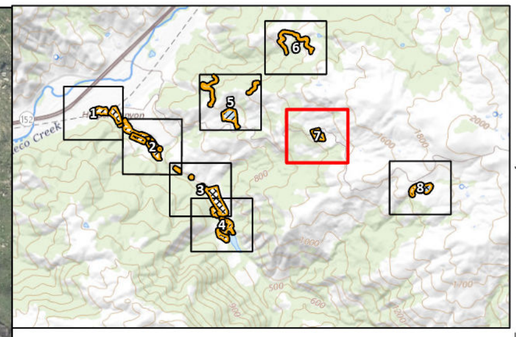

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Temporary	Valley Oak Woodland	0.0565	2460.4

UniqueID	Name	Description
V-14	Middle Cattle Stock Pond Impoundment	Impoundment, grading of banks, dam, and drainage.

N

1:1,500

0 75 150 300 Feet

0 20 40 80 Meters

Author: NicolasAnderson
Projection: Lambert Conformal Conic
Datum: NAD 1983 2011
Coordinate System: NAD 1983 2011 StatePlane California III FIPS 0403 Ft US

SEQUOIA Ecological Consulting, Inc.

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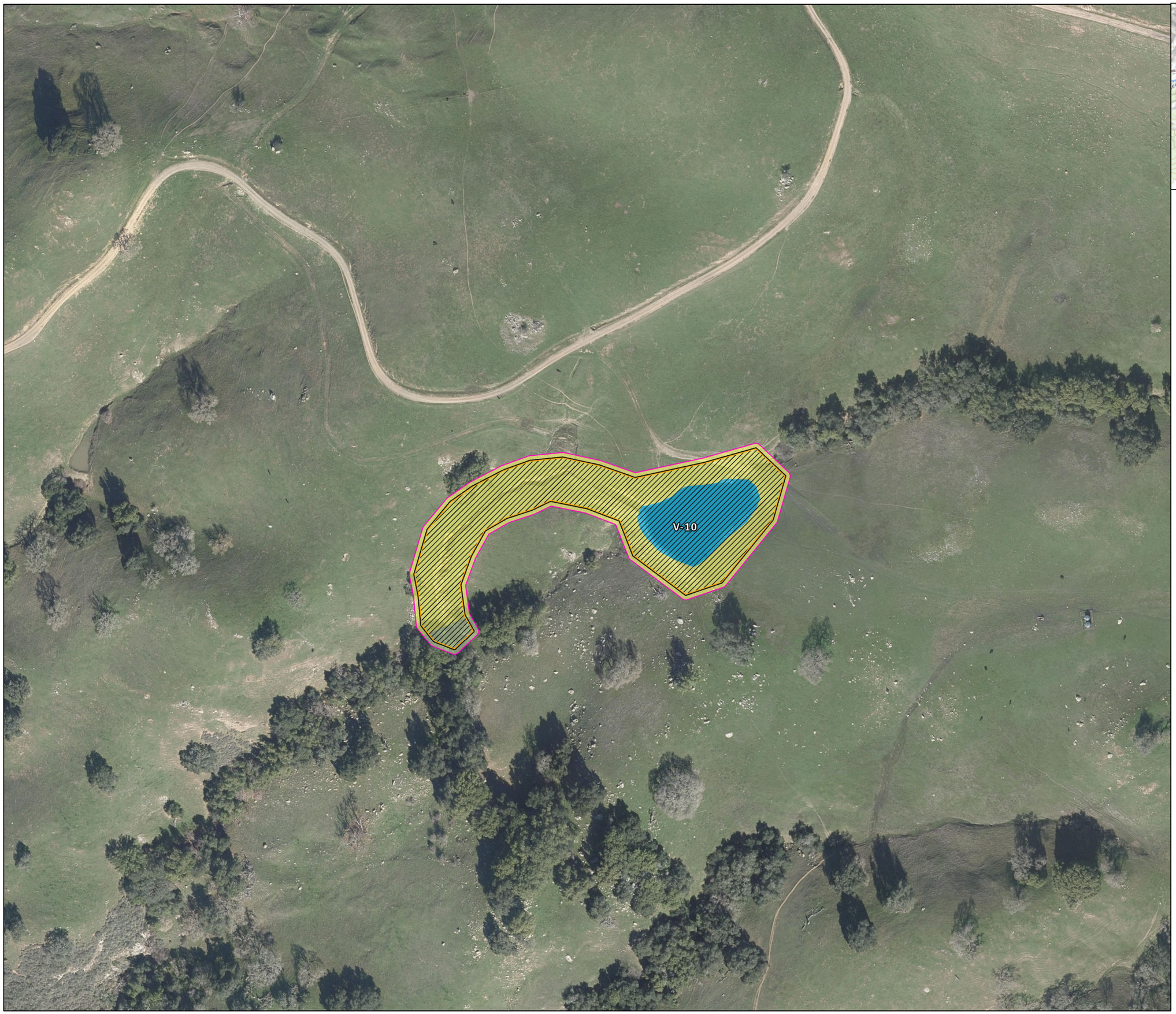

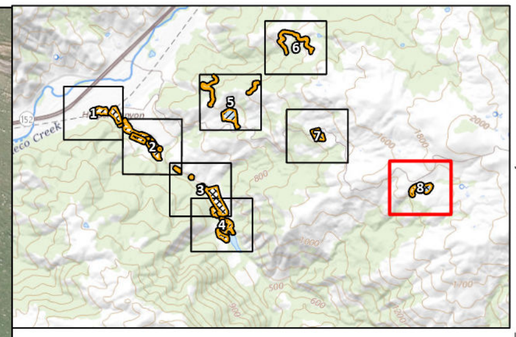

- Harper Canyon Creek Top-of-Bank (2020 estimate)
- Category 1 Stream Buffer
- Category 2 Stream Buffer

Impact Type

- Permanent
- Temporary
- Permanent Buffer (50')
- Temporary Buffer (10')

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Temporary	Sycamore Alluvial Woodland	4.1655	181447.57
Temporary	Valley Oak Woodland	0.0565	2460.4

UniqueID	Name	Description
V-10	East Cattle Stock Pond Impoundment	Channelized outflow eroded grasslands, connecting to a tributary downstream of the dam.

N

1:1,500

0 75 150 300 Feet

0 20 40 80 Meters

Author: NicolasAnderson
Projection: Lambert Conformal Conic
Datum: NAD 1983 2011
Coordinate System: NAD 1983 2011 StatePlane California III FIPS 0403 Ft US

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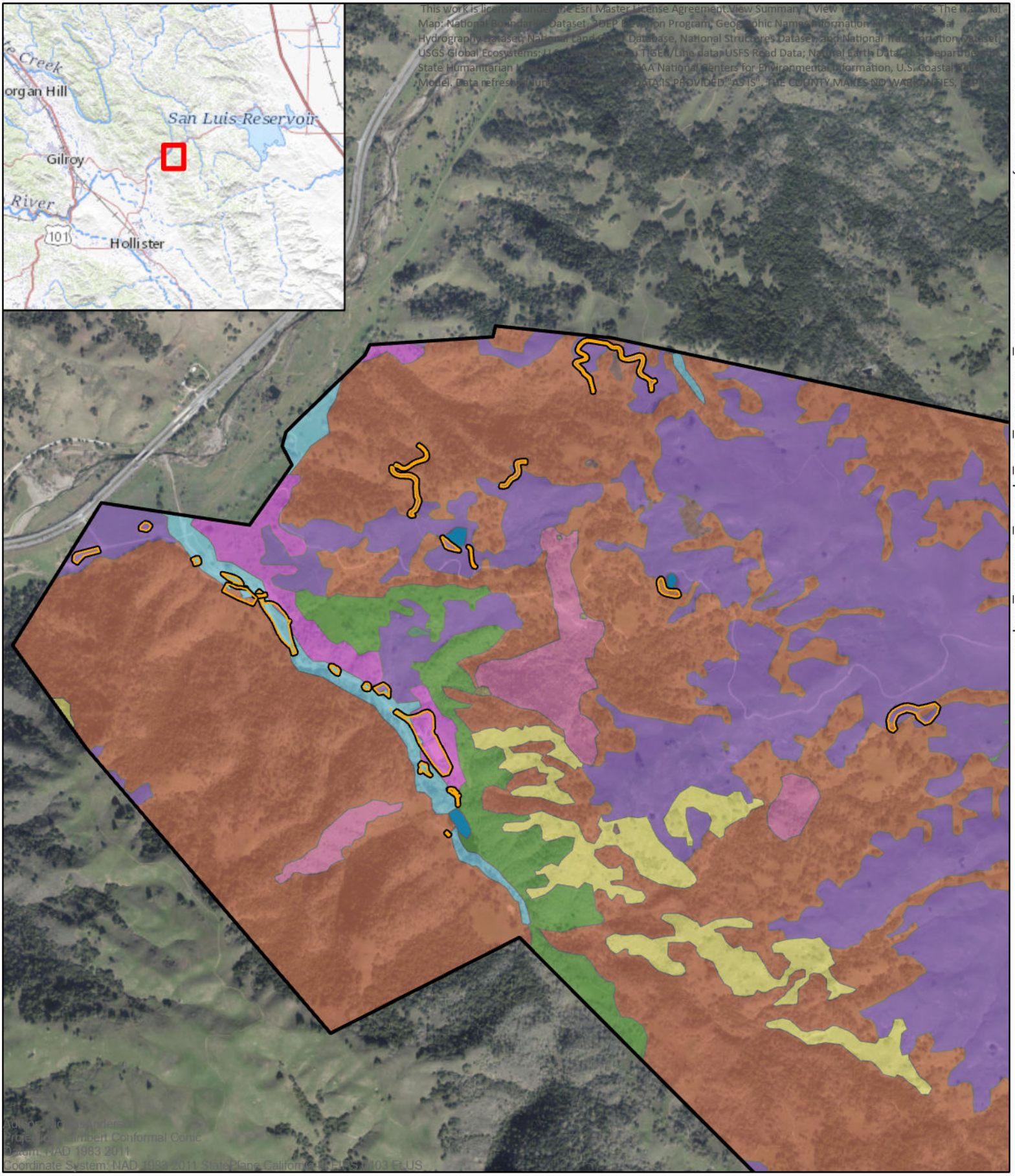

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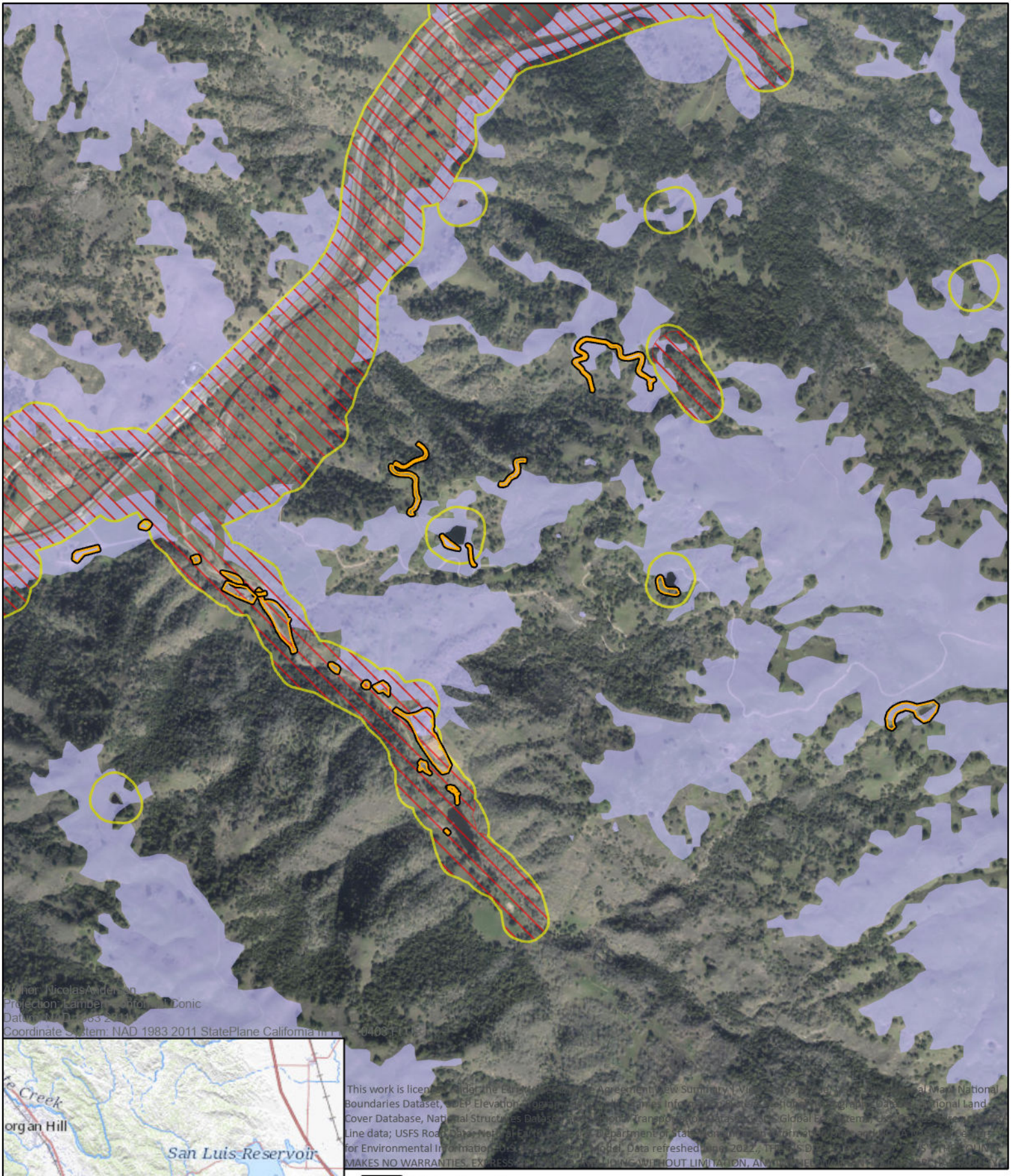

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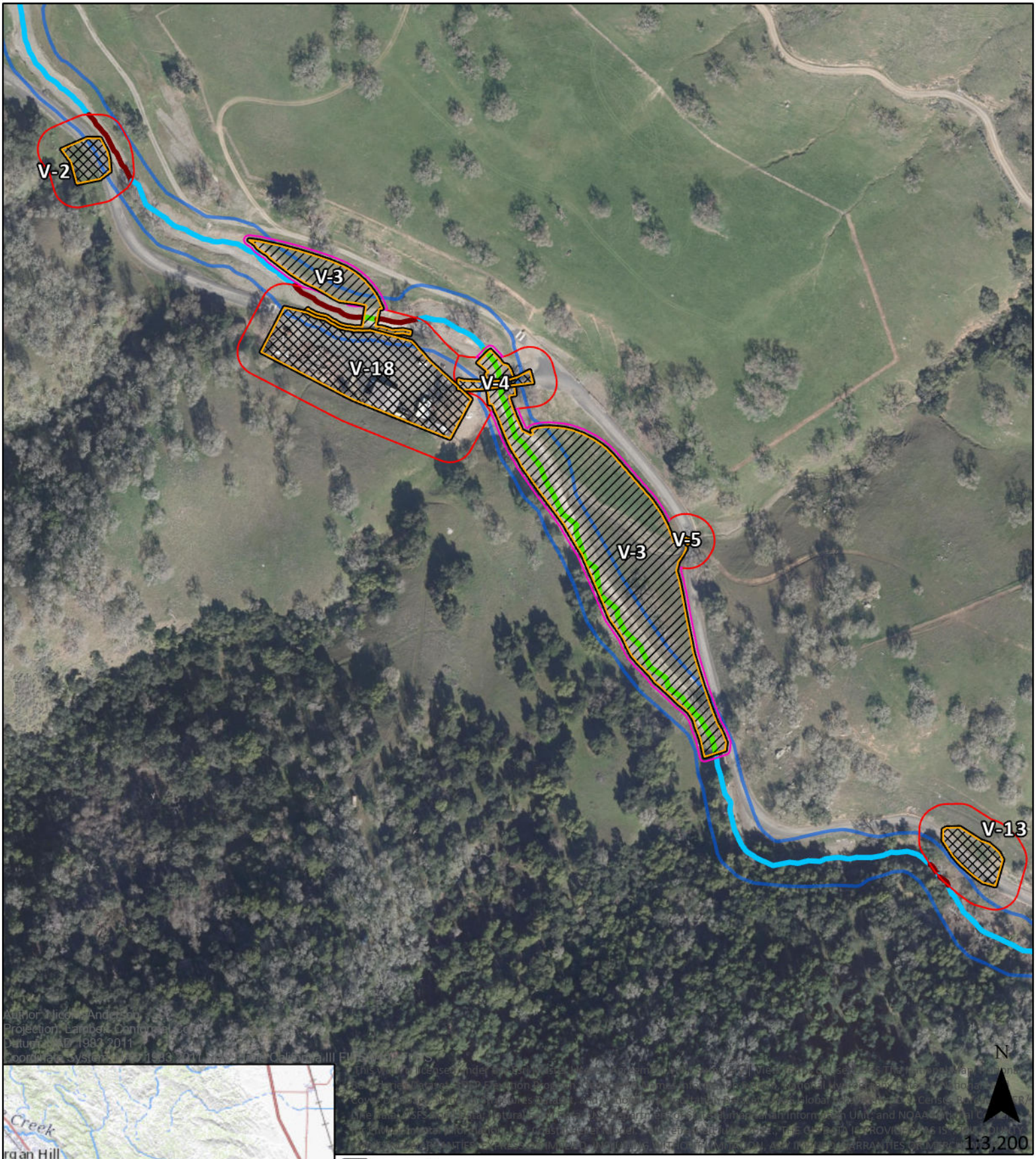

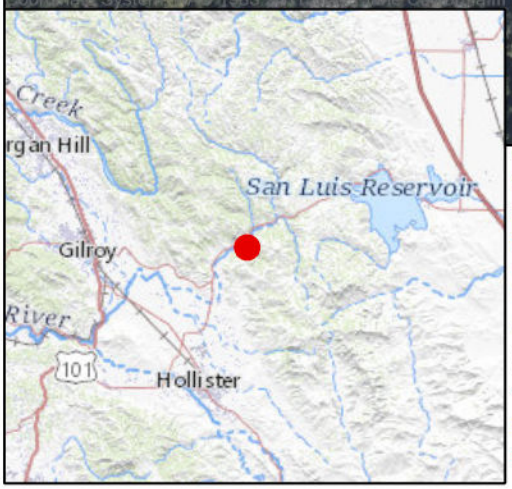

Permanent
Temporary
Permanent Buffer (50')
Temporary Buffer (10')
Category 1 Stream Buffer
Category 2 Stream Buffer

Creek Impact Type
Permanent
Temporary
None

Impact Type	Violation Area	Length (LF)
None	None	4978
Permanent	V-13	54
Permanent	V-18	257
Permanent	V-2	168
Permanent	V-4	13
Temporary	V-3	1041
Temporary	V-7	248
Temporary	V-8	216

0 100 200 400 Feet

0 20 40 80 Meters

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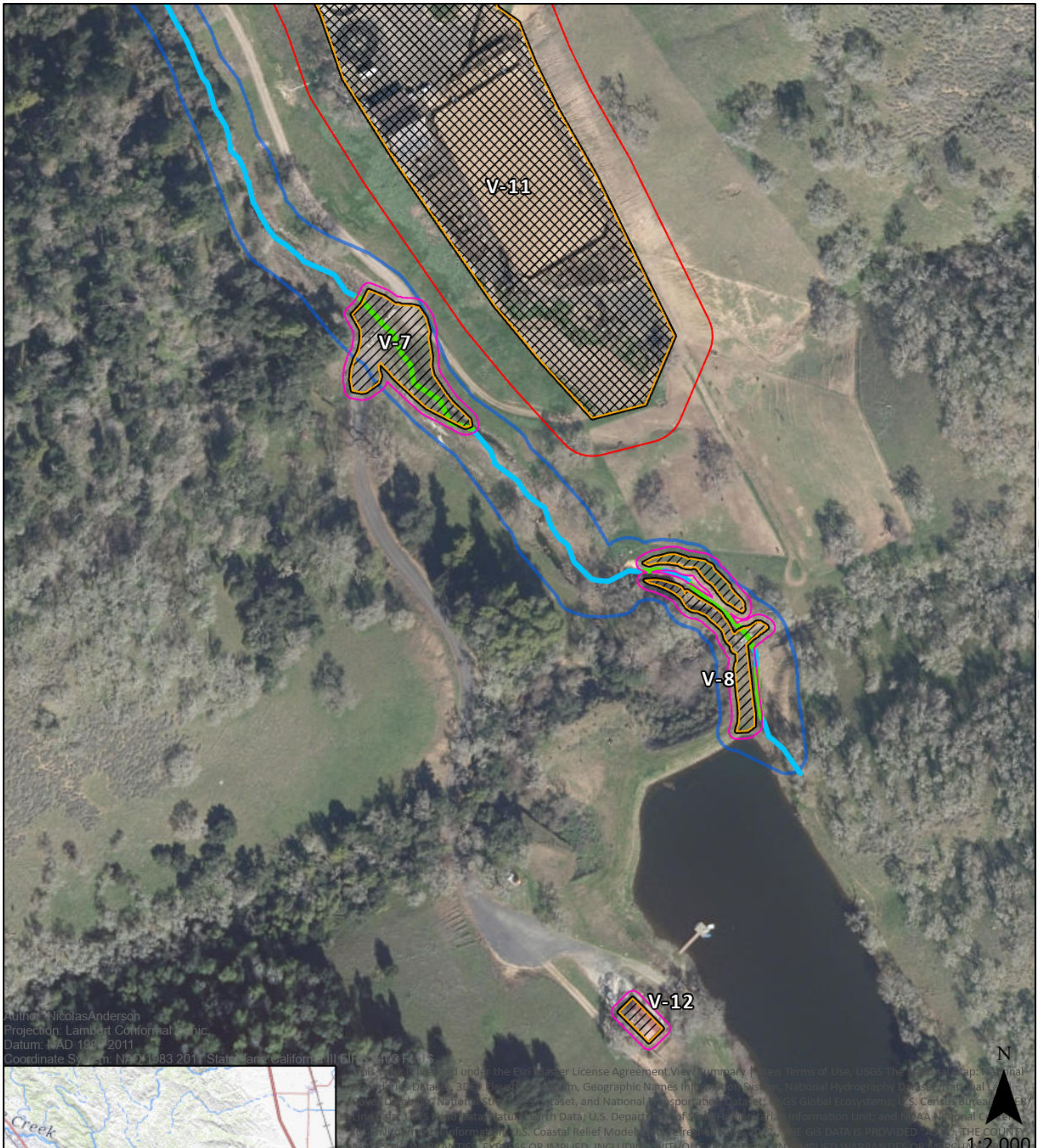

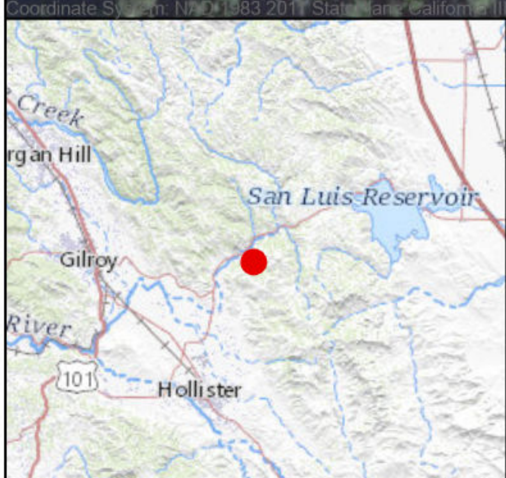

Permanent
Temporary
Permanent Buffer (50')
Temporary Buffer (10')

Creek Impact Type
Permanent
Temporary
None
Category 1 Stream Buffer
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Temporary	V-7	248
Temporary	V-8	216

0 60 120 240 Feet
0 12.5 25 50 Meters

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Appendix L

Santa Clara Valley Habitat Agency Fee Calculation Worksheets (FY21/22, Exhibits 2 and 3)

Exhibit 2: SCVHP PERMANENT FEE CALCULATOR WORKSHEET

Rev.Draft 06/28/2021, FY 2021-22

PROJECT APPLICANT INFO:

Project Applicant: Wyatt and Lacy Bourdet
Project Name: Bourdet Ranch NOV
APN (s): 898-19-003, 898-19-005, 898-19-043
Project Number: *to be provided by local jurisdiction*
Date: August 23, 2022 Jurisdiction/Agency: Santa Clara Valley Habitat Agency

Square Feet to Acres calculator		square feet equals	0.00	acres
Note: There are 43,560 square feet in 1 acre				

DEVELOPMENT FEE (see Habitat Agency Geobrowser Land Cover Fee Zones and Habitat Plan Figure 6-1 to determine land cover fees)

Habitat Plan Fee Type		Land to be permanently disturbed (acres)[1]		Fee per Acre		Fee Type Total
Land Cover Fee	Fee Zone A (Ranchlands and Natural Lands)	8.20	x	$22,518.00	=	$184,647.60
	Fee Zone B (Agricultural and Valley Floor Lands)	0.00	x	$15,537.00	=	$0.00
	Fee Zone C (Small Vacant Sites Under 10 Acres)	0.00	x	$5,630.00	=	$0.00
		A. Land Cover Fee Total			**=**	**$184,647.60**
Serpentine Fee		0.00	x	$70,975.00	=	**$0.00**
		B. Serpentine Fee Total			**=**	**$0.00**
Burrowing Owl Fee		0.00	x	$64,845.00	=	**$0.00**
		C. Burrowing Owl Fee Total			**=**	**$0.00**
Wetland Fee	Willow Riparian Forest	0.000	x	$186,524.00	=	$0.00
	Mixed Riparian	0.000	x	$186,524.00	=	$0.00
	Central California Sycamore Woodland	0.350	x	$353,284.00	=	$123,649.40
	Freshwater Marsh	0.000	x	$219,752.00	=	$0.00
	Seasonal Wetlands	0.000	x	$458,588.00	=	$0.00
	Pond	0.030	x	$197,226.00	=	$5,916.78
	Streams (linear feet)	491.690	x	$632.00	=	$310,748.08
		D. Wetland Total Fee			**=**	**$440,314.26**
		E. Total (=			**=**	**$624,961.86**
Nitrogen Deposition Fee				**Fee per New Daily Vehicle Trip**		
	1. Number of New Daily Vehicle Trips	1	x	$5.50	=	$5.50
	and/or					
	2. Number of New Residential Units	1	x	$52.01	=	$52.01
		F. Nitrogen Depositon Fee Total (1 and/or 2)			**=**	**$57.51**
TOTAL HABITAT PLAN FEES		**G. Total (= E+F)**				**$625,019.37**

Internal Use only	**Total Fees**
Perm	$625,019.37
Temp	$98,345.41
Total	**$723,364.78**

Notes:

[1] Stream fees are calculated based on linear feet.

Disclaimer: The fee calculator is available for your convenience. You may enter data to calculate an unofficial projection of the fees that will be required to be paid for your project. This is not an official SCVHA estimate. You assume the risk associated with using this calculator. The calculator approximates fees for your project and the reliability of the calculations produced depends on the accuracy of the information you provide. The calculations created by the fee calculator are not intended to be used as a final statement of fees for your project. Please contact the Planning Office of the SCVHA member agency where you have an active land use permit application to determine fees the specific fees and amount of fees that will be required for your project. CALCULATIONS CREATED BY THIS TOOL ARE NOT OFFICIAL SCVHA ESTIMATES.

Exhibit 3: SCVHP TEMPORARY FEE CALCULATOR WORKSHEET

Rev.Draft 06/28/2021, FY 2021-22

PROJECT APPLICANT INFO:

Project Applicant: Wyatt and Lacy Bourdet
Project Name: Bourdet Ranch NOV
APN (s): 898-19-043, 898-19-005, 898-19-003
Project Number: *to be provided by local jurisdiction*
Date: August 23, 2022 Jurisdiction/Agency: Santa Clara Valley Habitat Plan

Number of years in which the temporary activity occurs	1.00
Number of years in which site returns to pre-project conditions*	1.00
*Cannot exceed 1 year	
Fee Multiplication Factor	0.04

Square Feet to Acres calculator _____ square feet equals 0.00 acres
Note: There are 43,560 square feet in 1 acre

DEVELOPMENT FEE (see Habitat Agency Geobrowser Land Cover Fee Zones and Habitat Plan Figure 6-1 to determine land cover fees)

Habitat Plan Fee Type		Land to be temporarily disturbed (acres)[1]		Fee per Acre		Fee Multiplication Factor		Fee Type Total
Land Cover Fee	Fee Zone A (Ranchlands and Natural Lands)	9.68	x	$22,518.00	x	0.04	=	$8,718.97
	Fee Zone B (Agricultural and Valley Floor Lands)	0.00	x	$15,537.00	x	0.04	=	$0.00
	Fee Zone C (Small Vacant Sites Under 10 Acres)	0.00	x	$5,630.00	x	0.04	=	$0.00
				A. Land Cover Fee Total				**$8,718.97**
Serpentine Fee		0.00	x	$70,975.00	x	0.04	=	$0.00
				B. Serpentine Fee Total				**$0.00**
Burrowing Owl Fee		0.00	x	$64,845.00	x	0.04	=	$0.00
				C. Burrowing Owl Fee Total				**$0.00**
Wetland Fee	Willow Riparian Forest	0.000	x	$186,524.00	x	0.04	=	$0.00
	Mixed Riparian	0.000	x	$186,524.00	x	0.04	=	$0.00
	Central California Sycamore Woodland	3.310	x	$353,284.00	x	0.04	=	$46,774.80
	Freshwater Marsh	0.000	x	$219,752.00	x	0.04	=	$0.00
	Seasonal Wetlands	0.000	x	$458,588.00	x	0.04	=	$0.00
	Pond	0.610	x	$197,226.00	x	0.04	=	$4,812.31
	Streams (linear feet)	1504.720	x	$632.00	x	0.04	=	$38,039.32
				D. Wetland Fee Total			=	**$89,626.44**
TOTAL TEMPORARY HABITAT PLAN FEES				**E. Total (= A+B+C+D)**				**$98,345.41**

Internal Use only

	Total Fees
Perm	$625,019.37
Temp	$98,345.41
Total	$723,364.78

Notes:
[1] Stream fees are calculated based on linear feet.

Disclaimer: The fee calculator is available for your convenience. You may enter data to calculate an unofficial projection of the fees that will be required to be paid for your project. This is not an official SCVHA estimate. You assume the risk associated with using this calculator. The calculator approximates fees for your project and the reliability of the calculations produced depends on the accuracy of the information you provide. The calculations created by the fee calculator are not intended to be used as a final statement of fees for your project. Please contact the Planning Office of the SCVHA member agency where you have an active land use permit application to determine fees the specific fees and amount of fees that will be required for your project. CALCULATIONS CREATED BY THIS TOOL ARE NOT OFFICIAL SCVHA ESTIMATES.